

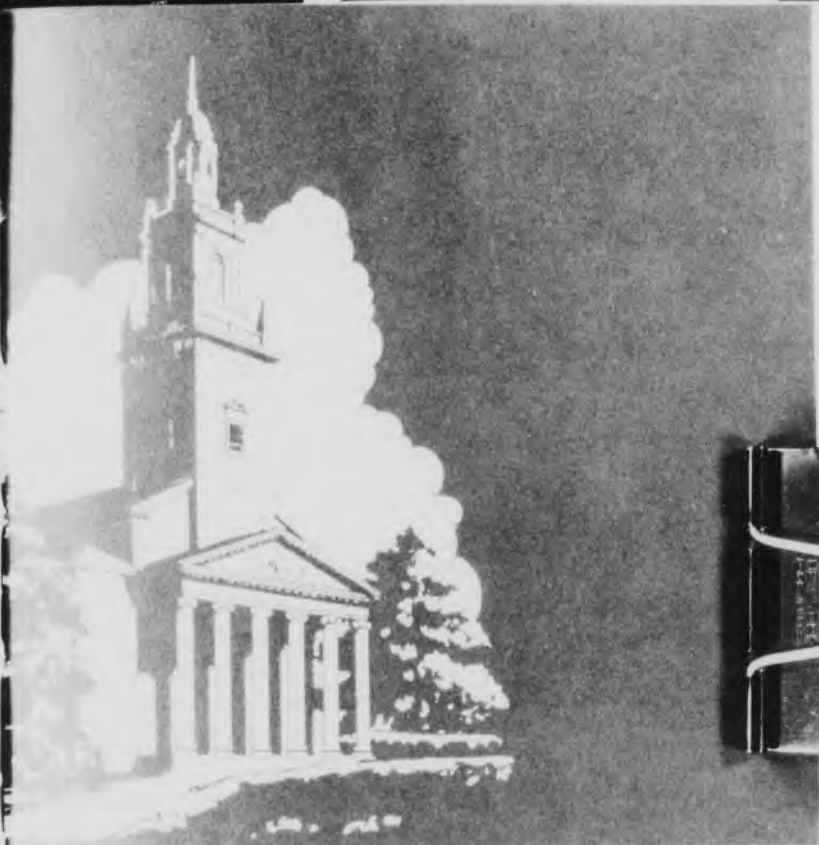


DENISON

UNIVERSITY
BULLETIN

CATALOG NUMBER 1960-62





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BULLETIN
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A View of the Campus
DENISON UNIVERSITY
and a portion of the Village of
GRANVILLE - OHIO



DENISON UNIVERSITY BULLETIN

Granville, Ohio

1960-62

130th and 131st Academic Years



A COLLEGE OF LIBERAL
ARTS AND SCIENCES

Founded 1831

Volume LX, No. 2

CATALOG NUMBER

July 1960

The Denison University Bulletin is published by Denison University, Granville, Ohio, four times a year in June, July, August, and October. Entered as second class matter at the Post Office at Granville, Ohio, under the Act of August 24, 1912.

CALENDAR 1960-1961

1960	1961
JULY	JANUARY
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31	
AUGUST	FEBRUARY
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SEPTEMBER	MARCH
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OCTOBER	APRIL
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NOVEMBER	MAY
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DECEMBER	JUNE
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1960

FIRST SEMESTER

New Student Days, Saturday-Thursday,
September 10-15
Registration Day, Thursday, September
15
Classes begin Monday, September 19
(8 a.m.)
Homecoming, Saturday, October 8
Oct's Day, Saturday, November 5
Mid-Semester Reports due Monday,
November 14
Thanksgiving Vacation begins Wednes-
day, November 23 (noon)
Thanksgiving Vacation ends Monday,
November 28 (8 a.m.)
Pre-Registration ends Saturday,
December 10
Christmas Vacation begins Friday,
December 16 (noon)

1961

Christmas Vacation ends Tuesday,
January 3 (8 a.m.)
Graduate Record Examinations, Fri-
day-Saturday, January 13-14
Classes end Friday, January 20 (6
p.m.)
Comprehensive Examination Reading
Period Monday-Wednesday, January
23-February 1
Comprehensive Examinations, Thurs-
day-Saturday, February 2-4
Final Examinations, Monday-Thursday,
January 23-February 2
First Semester ends Thursday, Febru-
ary 2 (4:30 p.m.)

SECOND SEMESTER

Registration Day, Monday, February
6
Classes begin Tuesday, February 7
(8 a.m.)
Mid-Semester Reports due Friday,
March 31
Spring Vacation begins Friday, March
31 (noon)
Easter Sunday, April 2
Spring Vacation ends Monday, April
10 (8 a.m.)
Pre-Registration ends Saturday, April
22
May Day-Mother's Day, Saturday-
Sunday, May 13-14
Classes end Friday, May 26 (6 p.m.)
Comprehensive Examination Reading
Period, Wednesday-Wednesday, May
24-31
Comprehensive Examinations, Thurs-
day-Saturday, June 1-3
Final Examinations, Monday-Thurs-
day, May 29-June 8
Commencement Monday, June 12

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STATEMENT OF OBJECTIVES

A college of liberal arts and sciences, dedicated to Christian ideals, Denison aims to help the student become a mature well-informed person.

Specifically, Denison seeks to enable each student to—

SWASEY CHAPEL

- Acquire facility in reading, writing, and speaking;
- Understand the cultural attainments of men;
- Know something of the meaning and methods of the main branches of learning;
- Prepare for his vocation through intensive study in a specific field;
- Think honestly, clearly, and constructively;
- Develop interest and pleasure in the continuing, creative use of his abilities and skills;
- Respect cultural and individual differences;
- Promote understanding among all peoples;
- Participate actively and responsibly in the processes of democratic government;

Reflect high standards of taste through sound critical judgment and fine discrimination;

Achieve philosophic and religious insights for consistent and constructive living.

The assertion that Denison University is a *Christian* college is a declaration of purpose. To be *Christian* a college should seek the following:

To foster in each student ethical and spiritual qualities;

To integrate each personality around Christian principles and ideals;

To stimulate a fearless and untiring search for truth;

To develop capacity and purpose for creative social and religious living;

To cultivate adherence to the highest ethical standards in economic, political, and social life; and

To animate the whole group with Christian idealism.

These purposes are to be realized by the following means:

Selection of a faculty of men and women of exemplary conduct and character, who are heartily and definitely committed to the Christian purpose of the institution, whose instruction is sympathetic with such a purpose and never hostile to it;

Offering specific instruction in religion;

Providing for the expression of religion through various suitable organizations and activities;

Upholding standards of effort and achievement that are thorough and honest; and

Observing Christian ideals in all corporate activities of the University.

By common declaration of trustees and faculty, Denison University makes these its aims to be progressively and continuously realized.

CALENDAR 1961-1962

1961	1962
JULY	JANUARY
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AUGUST	FEBRUARY
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SEPTEMBER	MARCH
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OCTOBER	APRIL
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NOVEMBER	MAY
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DECEMBER	JUNE
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10 11 12 13 14 15 16	10 11 12 13 14 15 16
17 18 19 20 21 22 23	17 18 19 20 21 22 23
24 25 26 27 28 29 30	24 25 26 27 28 29 30
31 -----	-----

1961

FIRST SEMESTER

New Student Days, Saturday-Thursday,
September 9-14.
Registration Day, Thursday, September
14.
Classes begin Monday, September 18
(8 a.m.)
Homecoming, Saturday, October 14
Dad's Day, Saturday, October 28
Mid-Semester Reports due Monday,
November 13
Thanksgiving Vacation begins Wednes-
day, November 22 (noon)
Thanksgiving Vacation ends Monday,
November 27 (8 a.m.)
Pre-Registration ends Saturday, Decem-
ber 9
Christmas Vacation begins Friday,
December 15 (noon)

1962

Christmas Vacation ends Wednesday,
January 3 (8 a.m.)
Graduate Record Examinations, Friday-
Saturday, January 12-13
Classes end Friday, January 19
(6 p.m.)
Comprehensive Examination Reading
Period, Monday-Wednesday, January
22-31.
Comprehensive Examinations, Thurs-
day-Saturday, February 1-3
Final Examinations, Monday-Thursday,
January 22-February 1
First Semester ends Thursday, Febru-
ary 1 (4:30 p.m.)

SECOND SEMESTER

Registration Day, Monday, February 5
Classes begin Tuesday, February 6
(8 a.m.)
Mid-Semester Reports due Friday,
March 30
Spring Vacation begins Friday, March
30 (noon)
Spring Vacation ends Monday, April 9
(8 a.m.)
Good Friday, April 20, No classes
after noon
Easter Sunday, April 23
Pre-Registration ends Saturday, April
28
May Day-Mother's Day, Saturday-Sun-
day, May 12-13
Classes end Friday, May 25 (6 p.m.)
Comprehensive Examination Reading
Period, Wednesday-Wednesday, May
23-30
Comprehensive Examinations, Thurs-
day-Saturday, May 31-June 2
Final Examinations, Monday-Thursday,
May 29-June 7
Commencement Monday, June 11



THEATRE ARTS BUILDING

GENERAL INFORMATION

Denison University is an independently-administered and financed, co-educational college of liberal arts and sciences. It is situated in Granville, Ohio, 27 miles east of Columbus, the state capital. Founded in 1831 as the Granville Literary and Theological Institution, Denison University was incorporated under its present name in 1856. Since its founding Denison has cooperated with the Board of Education of the American Baptist Convention, but its teaching has always been nonsectarian, and it accepts students without regard to race or creed.

Denison is accredited by the North Central Association of Colleges and Secondary Schools as a degree-granting institution. It has been certified by the Association since 1913, when it appeared on the Association's first published list of degree-granting institutions. Denison is also recognized and approved by the Association of American Universities, the Ohio College Association, the Ohio State Department of Education, the American Association of University Professors, and the American Chemical Society. The Denison Con-

servatory is a Liberal Arts College member of the National Association of Schools of Music.

A CHRISTIAN EDUCATION

By heritage and choice, Denison is a Christian college maintaining and developing Christian principles and ideals. Through the chapel services and the several religious organizations on the campus, students and faculty actively share religious life. Academically, Denison provides instruction in religion through two basic courses in General Education required of every candidate for a degree and through regular course offerings in the Departments of Religion and Philosophy on an elective basis.

The religious program centers largely in the weekly worship service in Swasey Chapel under the direction of the Dean of the Chapel. These services are non-denominational but seek to encourage the student to think through his own problems from the Christian standpoint.

The Denison Christian Association coordinates the student religious activities. Included are vesper services; special programs for the discussion of ethical and religious problems; the community social service program; the Young Women's Christian Association activities; Bonds of Friendship, which is the annual campus-wide campaign for funds for foreign students at Denison and for other philanthropies; and deputation teams which visit churches of many faiths in the vicinity of Granville.

Two three-day periods, one each semester, are organized as Christian Emphasis Days during which students and faculty participate in special chapel programs and class discussions with a guest speaker.

A PERSONALIZED EDUCATION

In and out of the classroom, a Denison education is a personalized education which fosters intelligent and responsible living. Recognizing that the personal achievement and personal culture of our college students become the ultimate standards of our nation, Denison has planned its total educational program accordingly. In the classroom the student receives a varied and valuable acquaintance with significant aspects of our American heritage and with current developments in our culture. In the extraclass program he has special opportunity to broaden this acquaintance and to pursue personal interests

which will give him the enduring rewards that intellectual living can give.

The William Howard Doane Library assumes great importance in the education and cultural life at Denison. Rich in its resources of books, periodicals, pamphlets, government publications, microfilm, and recordings, the library is the workshop of the student. In order that the library may best serve the total needs of the student, *both the reserve book section and the general book collection in the stacks are open to every student.* To have a student use libraries and their resources effectively during and after his college years, the emphasis of the reference service and the formal instruction by the library staff (which begins with the freshman research paper) is on methods of finding information and investigating subjects. The carrels and seminar rooms offer special facilities for independent study and research. The Browsing Room and the Denisoniana Room encourage the formation of good reading habits.

The enriching experiences offered by the fine arts are made available to every Denison student. Numerous art exhibits are held each year, and student work is frequently shown. An Art Treasure Collection has been assembled, and valuable tapestries, paintings, vases, and other *objets d'art* are on display. The Denison Art Loan Collection makes available framed pictures, etchings, and prints by world-famous artists to students for use in their rooms for a semester at a time.

Opportunities to hear and to participate in the production of good music are provided by concerts by the Denison choral groups; recitals by students, faculty, and guest artists; special programs by choral groups, the Denison String Orchestra, and the Denison Band. Musicians of national reputation are brought to the campus in concerts arranged by the Granville Festival Association in cooperation with the college.

Convocations with speakers of note are held each week. These programs are scheduled for Mondays at 11 o'clock except when the speaker or artist is to be shared with the public in a lecture or concert or dance recital. On those occasions the program is shifted to an evening at 8:15.

Dramatic productions of professional excellence are presented by the three theatres—Experimental, University, and Summer—operated at Denison. In recent years more than 50,000 persons have attended the thirty or more different dramatic productions offered annually. Some of the plays produced recently are *The Doctor's*

Dilemma, Tall Story, A Midsummer Night's Dream, The Bacchae, Come Back, Little Sheba, and Brigadoon.

Public speaking and debating have long been important cultural activities at Denison. In addition to the varsity debating and intramural speaking contests for men, Denison has intercollegiate forensics for women and for freshmen. Pending approval in 1960 is an application to the Federal Communications Commission for Denison University to construct a non-commercial educational radio station to operate on a frequency modulation of 91.3 megacycles with a transmitter output of 10 watts. The Denison Campus Government Association operates its own student-owned radio station, WDUB, which is a member of the Intercollegiate Broadcasting System.

Every Denison student is urged to take an extraclass interest in one or more academic areas. To encourage personal contributions by each student, *departmental clubs exist in almost every field of study.* Regardless of his area of study, a student who is interested in writing, editing, or otherwise assisting in the production of a publication has an opportunity to join the staffs of *The Denisonian*, the weekly newspaper; *Exile*, the literary magazine; and the *Adytum*, the year-book.

The Denison Scientific Association, established in 1887, issues the *Journal of the Scientific Laboratories* and meets biweekly for the presentation of scientific papers by faculty and students. The *Journal*, founded by Professor Clarence Luther Herrick in 1885, has an international reputation.

The Denison Society of Arts and Letters provides regular programs of literary and cultural papers and discussions open to the student body and the public.

The Denison University Research Foundation, founded in 1942 by a gift from Elmer M. Jones, Class of 1903, fosters and encourages constructive research in the arts and sciences by awarding Research Scholarships to men and women of promise.

DENISON BUSINESS COUNCIL

In order to relate the classroom program more closely to vocational performance, Denison has invited a number of outstanding businesses to affiliate themselves with the university as members of the Denison Business Council. These firms are Owens-Corning Fiberglas Corporation and Park National Bank, Newark, Ohio; Battelle

Memorial Institute, the Ohio Bell Telephone Company, Corrugated Container Company of Columbus, The F. and R. Lazarus Company, and Suburban Motor Freight, Columbus, Ohio; Warner and Swasey, Thompson Ramo Wooldridge Inc., and Standard Oil Company (Ohio), Cleveland, Ohio; Union Central Life Insurance Company, Cincinnati, Ohio; General Electric Company, Coshocton, Ohio; National Cash Register Company, and General Motors Corporation, Dayton, Ohio; United Air Lines, and Sears Roebuck and Company, Chicago, Illinois.

The Denison Business Council makes available to the students the counsel of policy-making officers of the several companies, provides on request classroom speakers on special topics and case study materials from company files, and encourages company visitations for firsthand observation of various business operations.

CAMPUS AND BUILDINGS

The campus of 350 acres centers on College Hill, a horseshoe-shaped ridge which rises to the north of the business district in Granville. On the crest of the hill are the academic buildings, the library, the chapel, and the hospital. North of the main college buildings are the spacious playing fields for athletic and recreational purposes and Fraternity Circle. Near the foot of College Hill and adjacent to the Lower Campus are grouped the attractive chapter houses comprising Sorority Circle.

SWASEY CHAPEL with its stately tower dominates the Denison campus and serves as a landmark to travelers approaching Granville. The building, dedicated in 1924, was named in honor of the donor, Dr. Ambrose Swasey. The chimes in the chapel tower are a memorial to his wife, Lavinia Marston Swasey. The original organ was completely rebuilt and doubled in size in 1954. Swasey Observatory, built in 1910, stands directly east of the Chapel.

THE WILLIAM HOWARD DOANE LIBRARY stands at the head of the quadrangle of academic buildings. The present structure, built in 1937, replaced the original building presented by Dr. William Howard Doane in 1878. The newer building was the gift of his daughters, Mrs. George W. Doane and Miss Ida F. Doane. In 1958 an addition doubled the reading room and stack space.

DOANE ADMINISTRATION BUILDING, containing the college offices and three classrooms, was the gift of Dr. Doane in 1894.

LIFE SCIENCE BUILDING, erected in 1941, is used by the departments of biological sciences, psychology, and philosophy. This building was the gift of Miss Ida Frances Doane.

BARNEY SCIENCE HALL is used by the departments of geology and geography, mathematics, and physics. It was the gift of Eugene J. Barney as a memorial to Eliam E. Barney, his father, and was erected in 1905.

TALBOT HALL is a classroom and office building for the departments of economics, English, government, history, modern languages, religion, and sociology. The building, erected in 1871, was named in honor of Samson Talbot, fifth president of Denison.

CHEMISTRY COTTAGE, near Life Science Building, completes the academic buildings on the quadrangle. The annex built in 1958 adds important laboratory equipment.

SLAYTER HALL, the proposed College Union building, the gift of Mr. and Mrs. Games Slayter, is in the planning stage in 1960 for erection on the Academic Quadrangle in 1961-62.

WHISLER HOSPITAL, built in 1929 as a memorial to Helen Arnett Whisler, is located near the Women's Quadrangle.

CLEVELAND HALL, on the south slope of College Hill near the Lower Campus, is the Women's gymnasium. Given by friends of the college living in Cleveland, it served as the Men's gymnasium from the time it was built in 1903 until 1950.

DOANE ART BUILDING, on the Lower Campus, was erected in 1905 by a gift from Dr. W. H. Doane to serve as the gymnasium for women. In 1953 it was remodeled for its present use. It contains studios, classrooms, and an art gallery for the display of exhibit material.

THEATRE ARTS BUILDING, erected in 1956 on College Street on the Lower Campus, contains the workshop for building scenery and making costumes with ample space for storing both scenery and costumes. Its small 200-seat auditorium, known as the Ace Morgan Studio Theatre, is named for a former student, LeRoy Morgan, Class of 1945, who lost his life in World War II. Its library contains the Ethel R. Outland Theatre Collection.

This building is the first new unit of the much larger Fine Arts Center that eventually will provide a large air-conditioned theatre seating 600 for the Denison Summer Theatre and University Theatre plays, music classrooms and studios, and a recital hall.

Other buildings in the Lower Campus group are Recital Hall, Burton Hall serving temporarily as the Conservatory of Music, Shepardson Hall, headquarters for the Air Force ROTC; King Hall, residence for upperclass men; and Stone Hall apartments.

DEEDS FIELD, which was named in honor of the donor, Colonel Edward A. Deeds of the Class of 1897, utilizes the natural amphitheatre on the slope to the north of the Chapel. The football field and stadium were built in 1922.

PHYSICAL EDUCATION CENTER, located just east of Deeds Field, was completed in 1950. Primarily the center of physical education for men, it serves a variety of college and community uses. The only section named when the building was erected was the Alumni Memorial Field House. This portion contains the indoor track and the undercover practice area for football, baseball, tennis, and volleyball teams.

In 1957 the remainder of the building was named the Livingston Gymnasium in honor of Walter J. Livingston, Class of 1909, who served as director of athletics from 1911 to 1952. This portion contains a completely modern gymnasium with apparatus and equipment rooms, classrooms, offices, and a spacious basketball court capable of seating 3,000 spectators. Adding greatly to the recreational and cultural facilities of Licking County, the Center provides adequate space for all major events such as lectures, concerts, commencement exercises, and other assemblies.

The next section, soon to be added, has been named the Gregory Swimming Pool in memory of M. O. Gregory, Class of 1929, an outstanding athlete. The pool is designed to serve the needs of both men and women. An additional wing to serve as the women's gymnasium is in the future plans.

Additions on the practice field to the north and west of Fraternity Row accommodate football, soccer, and lacrosse teams.

On the north campus at the center of the women's athletic grounds is Lamson Lodge, named for the donor, Julius G. Lamson. It serves as a shelter house and recreation classroom.

RESIDENCE HALLS

Denison recognizes the experience of group living as an important part of a college education. To that end the University operates residence and dining halls for all women students and for

all freshman men. Most of the rooms accommodate two students each, but many of the upperclass women live in suites for three or four students. Upperclass men live in one of ten fraternity chapter houses, in three college-operated residence halls as accommodations are desired, or in approved private dwellings in the village.

WOMEN'S QUADRANGLE on College Hill, at the eastern end of the ridge, contains seven residence halls accommodating approximately 700 women. They are Shaw Hall, named, in honor of the late President and Mrs. Avery A. Shaw; Beaver Hall, named in honor of Mary Thresher Beaver; Sawyer Hall, named for Charles Sawyer, an early benefactor of higher education for women; Deeds Hall, built in 1953 and named for Edith Walton Deeds, wife of Colonel Edward A. Deeds, Class of 1897; Gilpatrick House; and two halls built in 1960. The latter are Crawford Hall, residence for freshmen, named for Frederick C. Crawford; and Huffman Hall, dining hall with rooms for women on the two upper floors, named for three generations of the Huffman family of Dayton, Ohio, who have served as Denison Trustees.

All freshman men live in college-operated residence halls. Curtis Hall, both West and East wings, accommodates 195 students, some of whom are upperclass men. Dining facilities in Curtis West, enlarged in 1958, are adequate to care for residents in both wings and for 130 freshman and upperclass men in nearby Smith Hall, and others not taking their meals at fraternity houses. Curtis West, erected in 1940 as a memorial to Lanson Stage Curtis of the Class of 1896, was made possible by a gift from his mother, Mrs. Annetta R. Jewell. The East wing was added in 1946. Smith Hall, built in 1953, was named for Franklin G. Smith, honorary chairman of the Denison Board of Trustees.

ATHLETICS

The athletic program at Denison is an integral part of the physical education curriculum. Each student is encouraged to participate as fully in intramural and intercollegiate athletics as his academic program permits. The University provides professional coaching, excellent training facilities, and athletic equipment and supplies. It carefully supervises all intramural and intercollegiate sports.

Denison engages in intercollegiate football, soccer, basketball, track, baseball, tennis, golf, lacrosse, and wrestling. In its intercollegiate program the University seeks to compete with institutions of similar size and similar educational and athletic standards.

Denison is a member in good standing of the National Collegiate Athletic Association and the Ohio Athletic Conference.

The athletic policy of Denison University is controlled in its entirety by the faculty. The department of physical education operates within the academic budget, and all receipts from and expenditures for intercollegiate contests are handled by the University controller.

STUDENT GOVERNMENT AND SOCIAL LIFE

Denison students operate their own student organizations with a great degree of freedom and are regular members on policy-making groups of the University's administrative bodies, such as the committees on admissions, curriculum, and activities. The principal elective student officers direct the activities of the Denison Campus Government Association and serve as the student representatives on the Student-Faculty Council. This council recommends to both the Student Senate and the Faculty improvements in the regulation of campus activities.

The Denison Campus Government Association functions through the Senate, the Women's Council, the Judicial Councils, and the Boards of Control of Debate, Dramatics, Music, Publications, Religious Activities, and Women's Athletics.

In 1953 the Women's Council affiliated with the Intercollegiate Association of Women Students. Later in the same year the DCGA joined the United States National Student Association.

In each college-operated residence hall a House Council, made up of elected students, is responsible for hall activities in cooperation with an Assistant Dean of Women.

Responsibility for upholding the Denison code of social self-government rests with each student. Under this system the student can enjoy freedom within the limits of good taste and conduct; however, the effective functioning of the code requires that he accept fully the responsibility that goes with it. *Attendance at Denison is a privilege, not a right.* And Denison's traditions and principles, accepted by each student in his act of voluntary registration, require conduct in keeping with the standards of good society. *The University specifically forbids the possession or use of alcoholic beverages on the campus, in the fraternity and sorority houses, college buildings, and in any places where students reside.* Any student who indicates his unwill-

ingness or inability to accept this responsibility may be asked to withdraw at any time. The policies and regulations governing student life are printed in the *D Book*, student handbook.

The Inter-Fraternity Council and the Panhellenic Council work through the ten fraternities and nine sororities in developing an adequate social program. All of these national organizations maintain chapter houses on or near the campus, generously sharing their facilities with the students, faculty, and townspeople.

Fraternities with chapters at Denison are Sigma Chi, Beta Theta Pi, Phi Gamma Delta, Kappa Sigma, Phi Delta Theta, American Commons Club, Lambda Chi Alpha, Sigma Alpha Epsilon, Delta Upsilon, and Alpha Tau Omega.

Sororities with chapters at Denison are Chi Omega, Kappa Alpha Theta, Delta Delta Delta, Kappa Kappa Gamma, Alpha Phi, Alpha Omicron Pi, Delta Gamma, and Pi Beta Phi. In the fall of 1960 Alpha Chi Omega is engaged in colonizing a chapter.

AIR FORCE ROTC PROGRAM

In 1952 the United States Air Force established an extension unit of the Air Force Reserve Officer Training Corps on the campus of Denison University for the purpose of training selected students in certain functions normally performed by officers in the Air Force.

Students who successfully complete all requirements are commissioned as second lieutenants in the United States Air Force Reserve upon graduation from the University.

Freshmen and sophomores between the ages of 14 and 22 years, physically qualified, and acceptable to the Professor of Air Science (PAS), are eligible for the basic course.

Mere enrollment in AFROTC does not involve an obligation for active military service, nor does such enrollment automatically give the student draft-deferment status. Draft deferment is granted to AFROTC cadets who establish and maintain standards acceptable to the PAS and who agree (a) to enroll in and complete the advanced course, if accepted therefor; (b) to attend one summer camp of four weeks' duration, normally between the first year advanced and the second year advanced course; (c) upon completion of the course, to accept a commission, if tendered; and (d) to serve on active duty for a period of not less than three years after receipt of the commission.

The Air Force blue uniform is lent without cost to the student and is worn during the drill periods and at such other times as may be specified by the PAS. The student is responsible for the proper care of the uniform. Textbooks and other instructional material are supplied without cost by the University or the Air Force.

Advanced course students are paid at the rate of approximately \$27 a month. Pay during summer camp is at the rate of \$75 a month plus travel allowances, food, quarters, uniforms, medical care, and government insurance en route to and from—and while at—summer camp.

All cadets are eligible for participation in the AFROTC Marching Band, the AFROTC Drill Team, and the AFROTC Rifle Team. Outstanding advanced course students are eligible for selection as members of the Air Honor Society.

For data pertaining to credits and course content see Department of Air Science in this catalog. For additional information, write to the Department of Air Science, Denison University.



EDITH WALTON DEEDS HALL

ADMISSION

The Admissions Committee weighs carefully all factors which bear upon the applicant's likelihood of success at Denison and makes its selections accordingly. An applicant may be admitted either as a freshman or with advanced standing.

In evaluating an applicant, the Admissions Committee takes into consideration the quality of his academic record, aptitude test scores, recommendations, school and community activities, and the applicant's personal statement of his reason for attending college. In addition, a personal interview is highly desirable, although not compulsory. This interview may be held either at Denison or at a center near the applicant's home.

PRELIMINARY APPLICATION

Any student who desires to enroll at Denison should submit a preliminary application by requesting form or sending coupon in the Denison viewbook. Upon receipt of the preliminary application, the Admissions Committee places the applicant on the mailing list, and sends him a formal application during October of the year prior to entrance. If a prospective student submits his preliminary application after October of the year prior to entrance, he is sent a formal application immediately. An early date of application is desirable.

GENERAL ADMISSION REQUIREMENTS

Every applicant—freshman or transfer—is expected to meet the following minimum requirements:

GRADUATION AND COLLEGE CERTIFICATION from an accredited high school or preparatory school with at least 15 acceptable credit units, which must include the following:

- 4 units of college preparatory English
- 2 units of college preparatory mathematics (3 units highly recommended, especially for the student planning to major in science)
- 2 units of one foreign language
- 1 unit of history
- 2 units of science
- 4 remaining units (at least 2 units should be in the areas named above or in related areas.)

Exceptions to these requirements may be made by the Committee on Admissions of the University. Special consideration will be given to candidates for the degrees of Bachelor of Fine Arts and Bachelor of Music.

RECOMMENDATION BY THE MINISTER or other religious leader (as prescribed in the formal application blank).

PERSONAL STATISTICS and listing of school, church, and community activities (as prescribed in the formal application blank).

STATEMENT OF PURPOSE in attending college (as prescribed in the formal application blank).

HEALTH REPORT from applicant's physician, to be filed on the form furnished by the college after the applicant has been accepted.

FEES AND DEPOSITS. An applicant must pay these fees and deposits:

- (1) A nonreturnable fee of \$10 to accompany the formal application.
- (2) A registration deposit of \$25, and

(3) A room reservation deposit of \$25 except for a veteran or man who enters as a transfer student with sophomore, junior, or senior standing or a local commuting student and who does not desire dormitory accommodations.

These deposits are to be paid by applicant accepted for admission to Denison on or before the College Entrance Examination Board Candidates' Reply Date about the middle of May. Both deposits are refundable until June 1 upon written notice of withdrawal of the application (addressed to the Office of Admissions). An applicant from the waiting list, or a transfer student, accepted after June 1 is allowed two weeks in which to make the payment of deposits.

SPECIAL REQUIREMENTS FOR FRESHMEN

In addition to meeting the foregoing General Admission Requirements, a student who desires to enter as a freshman is expected to submit this information:

(a) Personal appraisal by secondary school principal, headmaster, or guidance officer.

(b) The Scholastic Aptitude Test of the College Entrance Examination Board. This test is required of all applicants. It may be taken in December, January, February or March of the senior year in high school. If extenuating circumstances prevent the applicant from taking this test, he must make other arrangements with the Director of Admissions.

Any student may be excused from certain college requirements by satisfactorily passing the Advanced Placement Examinations. (See under Privileges Open to Superior Students.)

ACCEPTANCE OF FRESHMEN

A freshman applicant is admitted on the basis of grades for seven semesters of secondary school work, and the completion of the foregoing requirements. Special consideration for acceptance on the basis of six semesters is given top-ranking applicants who take either the May or the December series of College Board Examinations (as described in the formal application blank.) Otherwise the Admissions Committee makes its initial selections by April 15 and establishes a waiting list from those applications which are then complete. Any openings occurring after that date are filled from the waiting list.

SPECIAL REQUIREMENTS FOR TRANSFERS

In addition to meeting the foregoing General Admission Requirements, a student who is eligible for advanced standing is expected to submit the following:

- (a) A complete, official transcript of his college record showing honorable dismissal from the college previously attended.
- (b) A recommendation from a dean of the college last attended.

ACCEPTANCE OF TRANSFERS

A transfer student who wishes to enter Denison as a sophomore will be considered for acceptance only after his complete first year record is available. A transfer student who wishes to enter Denison as a junior may be accepted provisionally during his sophomore year when his record for three semesters of college work is available. A student accepted for admission with advanced standing must complete at least four semesters in residence as a full-time student to be eligible for a Denison degree.

A student accepted for admission with advanced standing will be allowed credit without examination for liberal arts subjects taken at a college accredited by the North Central Association of Colleges and Secondary Schools or an accrediting body of similar rank. Class standing at Denison is based on the number and quality of credits accepted for transfer. A graduate of an accredited junior college will be classified as a junior on admission, and will be required to earn at least 66 semester-hours of credit (a normal program for two years) at Denison in fulfilling graduation requirements. A transfer student is required to earn at least a C average at Denison to qualify for a degree. Any requirements for graduation at Denison not satisfactorily completed at the college previously attended must be taken in normal sequence.

The Admissions Committee expects transfer students to be in good academic and disciplinary standing at the college previously attended. Semester-hours of credit—but not actual grades—are transferable for all liberal arts and science courses similar to those offered at Denison. Courses bearing below C grades are not accepted for transfer.

STUDENT SERVICES

Denison's counseling program functions to help the student make the best possible adjustment to college life. In the classroom, faculty members and students share the learning process in a way possible only in a small college. Outside the classroom, every student has access to a complete counseling service. A program of orientation for new students is provided during the week preceding registration.

COUNSELING STAFF

The counseling staff includes the deans of students, the director of testing and vocational services, the clinical psychologist, the university physician, specialists in family life and religion, selected faculty counselors, departmental chairmen, two assistant deans of women, student head residents for men, and junior and senior advisers.

A freshman is assigned to a selected faculty counselor who works with him through his first two years or until he chooses a major field. When he makes the choice of a major field, the student is assigned to a faculty counselor in the department in which he has chosen to major. A faculty counselor helps the student plan an academic program consistent with the aims and obligations of a liberal arts education, and a program which is in keeping with the student's abilities, aptitudes, and aspirations.

In the residence halls junior and senior advisers, a selected group of upperclass students, aid the freshmen in learning the many new phases of life in college. The two assistant deans of women serve as counselors for women. Student head residents in each hall for men also counsel students.

OFFICE OF STUDENT PERSONNEL

The Office of Student Personnel has been established so that students may turn to it in finding and using the various resources of the University. It is staffed by the deans of students (dean of women and dean of men), the director of the psychological clinic, and the director of testing and vocational services. In addition to providing specialized counseling for individuals the Office of Student Personnel coordinates many student activities. It keeps for each student a cumulative personnel record; it helps each student to discover his own interests and aptitudes so that he may wisely plan his entire college program.

HEALTH

Denison recognizes its responsibility for the health and well-being of its students by providing a complete medical service, adequate health instruction, and the efficient administration of dining halls and residence halls. The University director of student health services and four registered nurses maintain in Whisler Memorial Hospital an up-to-date clinic where prompt medical attention is available. The physician may be consulted for examination and treatment at specified hours, and a trained nurse is on duty at all times.

That students may develop habits of good health, instruction in health is provided in the department of physical education. Programs of study and training are designed to meet hygienic and recreational needs.

In administering the residence halls and dining halls, the University takes every safeguard to protect the health of its students. Trained dietitians supervise the choice, preparation, and serving of food.

TESTING AND VOCATIONAL SERVICES

Testing and Vocational Services, one of the Student Personnel Services, is the center of the University for general testing and guidance with educational and vocational problems. The services available to the student include personal counseling with educational and vocational problems; information about advanced programs of study in graduate and professional schools and the opportunities for scholarships, fellowships, and assistantships; tests of intelligence, interest, aptitude, achievement, and personality; placement in campus and summer jobs and, for seniors and alumni, placement in permanent positions.

STUDENT EMPLOYMENT

In making grant-in-aid work available to a limited number of worthy students who need to earn a part of their expenses in college, Denison University maintains a tradition established by its founding fathers. There is a variety of work, assisting in the laboratories, residence halls, dining halls, academic and business departments, and with the maintenance of the campus. Application for student employment should be made to the Secretary, Committee on Scholarships and Student Employment, or with the Director of Testing and Vocational Services. Work assignments are made through the Office of

Testing and Vocational Services. To maintain grant-in-aid employment a student must achieve a satisfactory scholastic record and perform his work assignment satisfactorily.

MILITARY SERVICE

Students with military obligations, including Selective Service, the United States Army, Marine Corps, and Navy, are counseled by the Military Adviser. Students who wish to be commissioned in the United States Marine Corps upon graduation have an opportunity to join a Platoon Leader class during the freshman year. Students interested in securing a direct commission in the United States Naval Reserve may apply during the second semester of the senior year.

VETERAN COUNSELING

Training at Denison University is approved by the Veterans' Administration under Public Law 550. Veterans are counseled by the Dean of Men.

TEACHER PLACEMENT

The Department of Education maintains a separate appointment service to assist graduates in seeking first teaching positions and in transferring to better positions upon evidence of successful experience.



PHYSICAL EDUCATION CENTER

REGISTRATION AND CLASSIFICATION OF STUDENTS

Registration, the formal enrollment in the college, is an agreement on the part of the student to abide by all college regulations. The procedure includes (a) payment of the prescribed fees to the Cashier, (b) preparation of a detailed schedule of classes, and (c) deposit of a copy of the class schedule with the Registrar. Every student must complete his registration at the time scheduled. Failure to do so will be considered *late registration*, entailing payment of a special fee of \$10. For *late pre-registration* a special fee of \$10 shall also be charged. *No student will be admitted to any class later than the second week of the semester.*

NORMAL REGISTRATION is set at 16 semester-hours of credit. To register for 17 or 18 semester-hours a student should be in good scholastic standing. This total should include the appropriate requirements in Physical Education. (See Plan of Study.) The normal academic load enables a student to meet the graduation requirements within eight semesters. A student who pays regular tuition charges is permitted to audit, without additional cost, one course a semester for which no credit may be claimed.

REDUCED REGISTRATION is recommended for a student who for any reason cannot carry a normal schedule satisfactorily. If reduced registration is advisable, a student may be required to carry a schedule of 12 to 14 hours of academic credit and be asked to devote an extra semester to fulfill the graduation requirements. Without special permission from the appropriate Dean of Students, 12 hours shall

be minimum registration for any regular student. With special permission of the appropriate Dean of Students, a regular student may register for 9-11 semester-hours.

EXCESS REGISTRATION. Upon petition to and approval by the Committee on Academic Status a student may take in excess of 18 credit hours per semester. When recommended by the student's adviser and approved by the Executive Committee, the regular excess-hour fee may be waived for a student whose cumulative grade-point average is 3.5 or more.

PARTIAL REGISTRATION enables a regular student, with the permission of the appropriate Dean of Students, to take eight or fewer academic hours a semester.

SPECIAL REGISTRATION is open to persons living within commuting distance of Granville, to certain foreign students who wish to take for credit or to audit courses of special interest to them but who are not degree candidates, and to certain graduates wishing to take postgraduate work. A special student may not register for more than 6 hours of academic credit except by permission from the Committee on Academic Status. A special student desiring credit must submit appropriate credentials to the Admissions Office.

CHANGES IN REGISTRATION are not ordinarily permitted. If a change is made after registration day, a fee of \$5 will be charged, unless waived by the Registrar for sufficient cause.

WITHDRAWAL FROM COURSES must be made by formal report to the Registrar signed by the student's adviser. *A student who withdraws from a course without official permission will receive a grade of F (failure) on his permanent record.* (See Scholastic Requirements under Plan of Study for grades recorded upon withdrawal from courses.)

WITHDRAWAL FROM THE UNIVERSITY. A student who finds it necessary to leave the University before the close of the semester must, in order to receive an honorable dismissal, report to the appropriate Dean of Students and arrange for an official withdrawal. Except in cases of illness and/or by permission of the Committee on Academic Status, grades of WP (with Fail penalty) or WF (with Fail penalty) will be entered on the permanent record of the student who withdraws from the University after the date when midsemester grades are due.

The college may, whenever in its judgment such action is for the best interest either of the student or of the student body, dismiss or refuse to enroll any student.

FIRST TRANSCRIPT of a student's record shall be issued free of charge. Additional copies will carry a charge of \$2 each.

The classification of students is determined by the amount of academic credit earned. The following requirements must be met:

FRESHMAN STANDING: A student is classed as a freshman unless he is deficient in more than one unit of preparatory work.

SOPHOMORE STANDING: A student must have 27 semester-hours of credit including required courses in English and in Physical Education.

JUNIOR STANDING: A student must have 62 semester-hours of credit.

SENIOR STANDING: A student must have 97 semester-hours of credit.

ELIGIBILITY RULE: A regularly enrolled student registered on a full-time basis (normally 12 semester-hours or more) shall be eligible to participate in all college and intercollegiate activities. The student whose scholastic record falls below a 2.0 average shall participate only after consultation with his counselor, the director of the activity, and the appropriate Dean of Students, regarding the extent of his participation in extracurricular activities.

By rule of the Ohio Conference freshmen are eligible to participate in intercollegiate athletics.

RECOGNITION OF CREDIT EARNED ELSEWHERE

RESIDENT TRANSFER CREDIT will be honored only if taken at an accredited college or university and only if the student submits an official transcript of credit prior to or at the time of the next succeeding registration at Denison.

Grades received at another institution shall not be computed into the Denison quality-point average, or be used to remove Denison quality-point deficiencies except by petition to and favorable action by the Committee on Academic Status. Denison will not accept below C grade work on transfer from another institution.

EXTENSION OR CORRESPONDENCE STUDY. Courses taken by extension (in an officially designated extension center of an accredited college or university) are credited on the same basis as resident transfer credit (above). Courses taken by correspondence are not accepted for credit at Denison. In exceptional cases a student may petition the Committee on Academic Status for consideration of credit for correspondence study.

EXPENSES

COST EACH SEMESTER

	1960-61	1961-62
Tuition	\$500	\$550
Activity Fee	\$ 50	\$ 60
Health Fee		\$ 15
Board	\$245	\$245
Room	\$155-170	\$165-180

Each student on full tuition normally pays only 67 per cent of his actual educational expenses. Gifts from alumni, parents, and friends supplement endowment and other income to enable the University to meet this difference. How long Denison and similar colleges and universities seeking to provide an education of high quality can postpone additional charges for tuition is clearly dependent upon the increasingly generous support of alumni, parents of present students, and other friends.

In view of the economic uncertainty of the times, the University reserves the right to make changes in costs at the beginning of any semester by publication of the new rates *for tuition and activity and health fees three months in advance, for board and room one month in advance of their effective date.*

THE TUITION OF \$500 for 1960-61 (\$550 for 1961-62) permits a student to take from nine to 18 semester-hours of credit. An additional charge of \$35 is made for each registered hour in excess of 18 hours. Any student desiring to take in excess of 18 semester-hours may petition the Committee on Academic Status for permission. *A superior student may take in excess of 18 semester-hours without additional charge for tuition if the student's petition receives approval of the Executive Committee of the Faculty.*

THE ACTIVITY FEE of \$50* paid by a degree candidate covers library, course, laboratory (except deposit for breakage), and health service.** The health service includes hospital care up to three days a semester (exclusive of medical and surgical costs such as X-ray, services of special nurses and consultants, doctor or nurse's calls to a student's room, supply of special medicines, or the use of special appliances). *For hospitalization in excess of three days a charge of \$10 a day is made.* The activity fee also supports the Denison Campus Government Association and certain other student organizations. Its payment admits the student to plays, concerts, lectures, intercollegiate

*Effective September, 1961 Activity Fee is \$60.

**Covered by separate Health Fee of \$15 a semester, effective September, 1961.

athletic contests, and covers a subscription to the weekly newspaper, the literary magazine, and the yearbook.

A part-time student pays tuition at the rate of \$35 for each semester-hour of credit.

AUDITING classes is a privilege that may be granted to any student. A regularly-enrolled full-time student may be permitted to audit one course each semester without additional fee and without academic credit. In all other cases, an auditor shall pay a sum equal to half the tuition paid by a part-time student.

ROOM RENT for 1960-61 is \$155 a semester for each student if two or more room together. The price of a single room for 1960-61 is \$170 a semester. These charges will change in 1961-62 to \$165 and \$180. *No room is rented for a shorter period than one semester.*

The cost of any damage to the furniture or the room beyond ordinary wear will be assessed to the occupant.

MEALS are served in the college dining halls throughout the academic year except during vacations. The charge for board is \$245 a semester.

BOOKS AND SUPPLIES cost approximately \$30 to \$40 a semester.

CONSERVATORY OF MUSIC FEES are required of a student taking *private lessons* in Voice, Organ, Piano, Violin, Violoncello, Harp, or Wind Instruments, unless the student is majoring in music. On the basis of one private lesson a week including the necessary practice time, the charge is \$35 a semester-hour. (If the private lessons raise the registration to an excess of 18 semester-hours, the student is subject to the fee for excess registration.)

Any student paying regular tuition may attend *classes* (not private lessons) *in voice or instrumental music* without extra charge.

A noncollegiate student pays \$60 a semester for one lesson a week and \$110 for two lessons. If he takes courses other than private lessons, the student pays the part-time tuition fee of \$35 a semester-hour of credit.

PAYMENT OF BILLS

BILLS ARE PAYABLE to Denison University in the Controller's office. To help develop in the student a sense of responsibility and a greater appreciation of the educational opportunity, the University has a policy of collecting semester bills from the student rather than from

his parents. Semester bills are due on August 20 for the first semester and January 10 for the second semester but may be paid in advance. All other bills are due within 10 days from the date presented. Bills past due are subject to a service charge of \$2. On request, a receipted bill is issued when the statement is returned.

A student is ineligible to attend classes unless his bills are paid when due. *A student will be denied an honorable separation, an official record of credits, or a diploma until all college bills are paid in full.*

DEFERMENT of one-half of the net bill for the first semester is allowed until November 1, and for the second semester until April 1, provided the request is made to the Cashier on or before the due date.

As a convenience to parents of students, Denison makes available a monthly pre-payment plan which also provides insurance for continued payment of educational expenses in case of death or disability of the parent. Details of this plan are sent to the student as soon as he has been accepted for admission. Anyone wishing information in advance of this time should write to Insured Tuition Plan, 112 Water Street, Boston 9, Massachusetts.

REFUNDS

Withdrawal from the University at any time is official only upon written notice to the appropriate Dean of Students. A request to the Registrar for a transcript of credits shall not be regarded as a cancellation of a room reservation or considered a notice of withdrawal from the college.

Cancellation of reservations for the fall semester must be made by women prior to May 1 and by men prior to May 15 in order to release residence hall space and to permit others to be admitted for registration. Both the registration deposit of \$25 and the room deposit of \$25 are forfeited if the time limit is not observed. *If a student does not preregister by cancellation date, all deposits shall be forfeited.*

(See Fees and Deposits under Admission for regulations pertaining to deposits of an entering student.)

Any student withdrawing or dismissed from the University during the academic year shall forfeit his registration deposit. Any student moving out of a college residence hall during the academic year shall forfeit his room deposit.

The room deposit of a student who cancels his room reservation within the time limit indicated above will be applied to his bill for the fall semester. In the case of a senior, or withdrawing student entitled to a refund, room and/or registration deposits will normally be refunded in June.

Except in cases of illness confirmed by a physician, the charges for withdrawal from the University or cancellation of a dining hall or residence hall reservation after August 20 for the fall semester or January 10 for the spring semester shall be 25 per cent of the semester tuition, 25 per cent of the semester board and the full residence hall semester rent. Neither the activity fee nor the health (1961) fee shall be refundable. In case of illness the room and/or registration deposits are forfeited. These policies shall apply to both returning and entering students.

After Registration Day (or after the first day of Orientation Week for an entering student), there shall be no refund of room rent or board charge, except in the case of a student withdrawing from the University because of illness. Such a student shall be charged 10 per cent of the semester room rent and board charge for each week or part thereof.

A student voluntarily withdrawing or dismissed for disciplinary reasons from the University during a semester will be charged 25 per cent of tuition (not to exceed the semester charge) for each week or part thereof enrolled. (Enrollment begins with the first day of classes.) A student withdrawing from the University during a semester because of illness shall be charged 10 per cent of tuition (not to exceed the semester charge) for each week or part thereof enrolled. There shall be no refund of either the activity fee or the health (1961) fee.

The excess hours fee or fees for applied music lessons shall not be refunded in the case of a student withdrawing from the University or from a course.



FRANKLIN G. SMITH HALL

SCHOLARSHIPS AND GRANTS-IN-AID

Denison University recognizes promise and intellectual attainment of its students by awarding a number of Honor, Tuition, Founders, and special scholarships, and grants-in-aid. These awards vary in value and are available to a limited number of entering students, to a larger number of students in residence, and to a limited number of graduates. Applications for all scholarships based on financial need must be made through the College Scholarship Service of the College Entrance Examination Board. Forms for such application may be obtained by addressing the Office of Admissions, Denison University, Granville, Ohio.

SCHOLARSHIPS

DENISON TUITION SCHOLARSHIPS. Denison Tuition Scholarships of \$4,000 are awarded on a four-year full-tuition basis to high school seniors of high intellectual ability and strong moral character. These awards are made in eight equal amounts of \$500, payable at the beginning of each semester. Applicants must possess qualities of leadership as shown by their activities in preparatory school, church, and neighborhood groups. Applicants are required to take the Scholastic Aptitude Test (verbal and mathematical) of the College En-

trance Examination Board, together with its Achievement Test in English and in two additional fields of the candidate's choice. Applicants may take the January or March series, preferably the former. The applicants will be judged on the basis of the results of the tests and the accepted application for admission. Interviewing of applicants by college officials will be arranged either on the campus or in regional centers. *The award is for four years providing the recipient maintains a 3.25 grade average.* Probation for any cause automatically voids the scholarship and makes reapplication necessary when the probation is removed. Request to the Office of Admissions for application blank should be made prior to March 1.

DENISON FOUNDERS' SCHOLARSHIPS. Denison Founders' Scholarships of varying amounts are awarded to high school seniors with strong leadership activities, superior scholastic standing, and need for financial help to attend college. *The awards are for four years providing the recipient maintenance of 2.75 grade-point average.* Probation for any cause automatically voids the scholarship and makes reapplication necessary when the probation is removed. Requests for the application should be made to the Office of Admissions.

DENISON HONOR SCHOLARSHIPS (Part-tuition)

Denison Honor Scholarships are similar to Tuition Scholarships except that the financial award is less than full tuition. The award is for four years, providing the recipient maintains a 3.0 grade-point average.

THE DENISON UNIVERSITY RESEARCH FOUNDATION SCHOLARSHIPS

Denison University Research Foundation Scholarships of varying amounts are awarded annually to upperclass men and women showing a genuine interest in research. Intellectual ability and qualities of leadership are taken into consideration in the selection of students for these awards which may be renewed for graduate study.

THE EBENEZER THRESHER FUND (\$10,000)

The income from this fund is divided equally among four outstanding men, one from each class, who achieve and maintain a high scholastic record, who show promise of usefulness, and who are of unquestionable moral character. Selection is made by the Faculty of the University upon recommendation of the Committee on Scholarships. The freshman recipient is chosen at the end of his first semester. The award is renewed each year, providing a 3.25 grade average is maintained.

THE MARY HARTWELL CATHERWOOD SCHOLARSHIP FUND (\$2,000)

The income from this sum is awarded by the Committee on Scholarships upon the recommendation of the chairman of the Department of English to a junior or senior student definitely planning a career in writing.

THE FRANCIS WAYLAND SHEPARDSON SCHOLARSHIP FUND (\$5,000)

The income from this sum is awarded by the Committee on Scholarships to students who have shown proficiency in courses in American History.

THE CORA WHITCOMB SHEPARDSON SCHOLARSHIP FUND (\$5,000)

The income from this sum is awarded by the Committee on Scholarships to students who have shown proficiency in courses in Art.

THE WILLIS A. AND FRANCES W. CHAMBERLIN SCHOLARSHIP

The income from this fund is to be used to aid students of high scholarship majoring in the Humanities.

THE JULIET BARKER SARETT SCHOLARSHIP FUND (\$10,000)

This sum yields an income to be awarded to students who have shown general excellence in their academic work, particularly in English and Theatre Arts. Four scholarships, two in each subject, are awarded by the Committee on Scholarships at the end of the junior year upon recommendation by the chairman of the respective departments.

THE WALTER LEROY FLORY SCHOLARSHIP FUND (\$2,500)

To qualify for aid from the income on this fund a student shall (1) be a member of the junior class who may be expected to graduate with his class, and (2) be adjudged by the Committee on Scholarships to show promise of professional success and leadership.

THE KENNETH I. BROWN SCHOLARSHIP (\$50,000)

The income from this fund, established by the Danforth Foundation, Inc., to honor its executive director who also served as the 13th President of Denison University, is awarded by the Committee on Scholarships to a senior or junior man who is interested in teaching as a career. The amount of the grant is not less than \$1,200 nor more than \$1,500 a year. Selection is based on high scholastic ability, character, and personal qualifications.

HONOR SCHOLARSHIPS IN MUSIC

THE ELIZA SMART SHEPARDSON SCHOLARSHIP FUND (\$2,500)

The income from this sum is awarded by the Committee on Scholarships to worthy students enrolled in the Conservatory of Music.

THE GERTRUDE CARHARTT BRELSFORD MEMORIAL FUND (\$2,000)

The income from this sum is awarded to worthy students enrolled in the Conservatory of Music.

THE PRESSER MUSIC FOUNDATION SCHOLARSHIPS

The sum of \$350 is made available annually by the Presser Music Foundation to students planning to make their living in music. Selection of the students is made by the Committee on Scholarships on recommendation of the Faculty of the Denison Conservatory of Music.

GRADUATE HONOR SCHOLARSHIPS

THE DENISON UNIVERSITY TUITION SCHOLARSHIP AT THE OHIO STATE UNIVERSITY

The Denison University Tuition Scholarship is one of the Ohio College Tuition Scholarships established by the trustees of the Ohio State University and is open to graduates of Denison for one year. Nominations for this scholarship are made by the President and the Dean of the College.

RHODES SCHOLARSHIPS

The Cecil Rhodes Scholarships, tenable for three years at Oxford University, England, are open to men who have completed their sophomore year in an American college. These scholarships are made available annually on the combined basis of character, scholarship, athletics, and leadership in extracurricular activities. Men interested in competing for this national award should consult the Dean of the College.

THE DENISON UNIVERSITY SCHOLARSHIP FOR THE UNIVERSITY OF CHICAGO LAW SCHOOL AND BUSINESS SCHOOL

This scholarship will be awarded upon recommendation of Denison University to a student in the graduating class for the study of law for the next academic year at the University of Chicago Law School, providing the applicant meets its requirements for admission. The scholarship provides full tuition for one year and is renewable,

upon satisfactory completion of the year's work, for the last two years of the Law School course. Entry to the Business School is also available on a scholarship. Application is made through the Denison Office of Testing and Vocational Services.

OTHER SCHOLARSHIPS

The Fulbright Scholarships of the United States Educational Exchange program, authorized by Public Law 584 in the 79th Congress, known as the Fulbright Act, are designed to promote better understanding of the United States in other countries, and to increase mutual understanding between the people of the United States and the people of other countries. The Dean of Men submits the name of a worthy student.

The National Woodrow Wilson Fellowship program, the Danforth Foundation, and others are available to Denison University candidates for graduation. Application is made through the Office of Testing and Vocational Services at Denison.

SPECIAL SCHOLARSHIPS

THE BAPTIST SCHOLARSHIP FUND

Daughters and sons of Baptist ministers and missionaries receive a scholarship allowance of \$250 a semester as long as they maintain a 2.0 scholastic average. This aid is given in recognition of Denison's heritage from the Baptist denomination throughout the entire history of the college.

GRANVILLE CENTENNIAL SCHOLARSHIP

The Granville Centennial Scholarship is a four-year award amounting to \$150 a year. A high ranking student in the graduating class of the Granville High School is selected by the University and the Superintendent of Schools in accordance with restrictions laid down by the Denison Board of Trustees. This scholarship was established in recognition of contributions made by residents of Granville to the Centennial Endowment Fund.

THE LUBRIZOL SCHOLARSHIP

This scholarship supported by the Lubrizol Foundation of Cleveland, Ohio, to encourage study in chemistry provides \$200 to a major student selected by the Department of Chemistry.

THE LaVERNE NOYES SCHOLARSHIP FUND

The LaVerne Noyes Scholarships are restricted to needy students who are children or blood descendants of those who served in the Army or Navy of the United States in World War I.

THE ALMA B. SKINNER SCHOLARSHIP FUND

This fund in the amount of \$1,000 was established by the Blasdel Family in June 1959 and is to be expended over a five-year period. It honors a member of the Denison faculty during the years 1920-40.

GRANTS-IN-AID

GRANTS-IN-AID should be sought only by those who need help in meeting the expenses of their college education. A number of grants-in-aid which require the recipient to complete a work assignment are available.

Grants-in-aid are awarded after a student has been admitted to Denison and remain in force for one year only, subject to renewal by special action of the Committee on Scholarships and Student Employment. (Renewals are announced on or about May 15.) The Committee may vary the amount of the grant as the need of the student fluctuates.

An applicant for a grant-in-aid must show evidence of academic worth. He must remain in good standing for the duration of his grant, and if for any reason he is placed on probation, financial assistance may be withdrawn.

The proper form for application may be obtained from the chairman of the Committee on Scholarships and Student Employment.

GRANTS AND SCHOLARSHIPS FOR MEN AND WOMEN

THE FREDERICK P. AND MARY T. BEAVER SCHOLARSHIP FUND (\$70,254)

THE MARY F. AND FRED W. BENJAMIN MEMORIAL SCHOLARSHIP FUND (\$1,000)

THE MILLARD BRELSFORD MEMORIAL SCHOLARSHIP FUND (\$1,435)

THE SAMUEL B. BRIERLY SCHOLARSHIP FUND (\$276,266)

THE WELLS A. AND CYNTHIA ALDRICH CHAMBERLAIN SCHOLARSHIP FUND (\$5,000)

THE CLASS OF 1913 SCHOLARSHIP FUND (\$1,000)

THE CLASS OF 1917 WAR MEMORIAL SCHOLARSHIP FUND (\$3,414)

THE CLASS OF 1929 SCHOLARSHIP FUND (\$6,750)

THE EDWARD TAYLOR CLISSOLD MEMORIAL SCHOLARSHIP FUND (\$3,349)

THE BLANCHE LEMERT COPELAND SCHOLARSHIP FUND (\$21,942)

THE DENISON MEMORIAL SCHOLARSHIP FUND (\$840)

THE JOHN H. DOYLE SCHOLARSHIP FUND (\$2,500)

THE ELIZABETH S. EWART SCHOLARSHIP FUND (\$2,506)
THE FRANK C. EWART MEMORIAL SCHOLARSHIP FUND (\$4,000)
THE MINNIE FARNER-MILLER SCHOLARSHIP FUND (\$250)
THE DORA A. FORSYTHE SCHOLARSHIP FUND (\$9,738)
THE DAVID E. GREEN MEMORIAL SCHOLARSHIP FUND (\$3,337)
THE G. O. GRISWOLD SCHOLARSHIP FUND (\$5,000)
THE MASUO S. AND KIYO HOSHIDE SCHOLARSHIP FUND (\$807)
THE H. RHODES HUNDLEY MEMORIAL SCHOLARSHIP FUND (\$550)
THE EMORY W. HUNT SCHOLARSHIP FUND (\$7,608)
THE CHARLES T. LEWIS SCHOLARSHIP FUND (\$5,000)
THE BLANCHE MCCOY-HUMPHREY SCHOLARSHIP FUND (\$2,500)
THE LESLIE B. MOSS SCHOLARSHIP FUND (\$25,641)
THE N. W. NEPTUNE SCHOLARSHIP FUND (\$200)
THE LAVERNE NOYES SCHOLARSHIP FUND (\$45,508)
THE PEOPLES STATE BANK SCHOLARSHIP FUND (\$1,000)
THE GEORGE M. AND HARRIETTE MCCANN ROUDERUSH SCHOLARSHIP
FUND (\$18,494)
THE GEORGE H. SHORNEY SCHOLARSHIP FUND (\$7,500)
THE FRANKLIN G. SMITH SCHOLARSHIP FUND (\$10,000)
THE AMANDA SPERRY SCHOLARSHIP FUND (\$1,000)
THE HERBERT F. STILWELL SCHOLARSHIP FUND (\$32,121)
THE CHAPLAIN THOMAS B. VAN HORNE MEMORIAL SCHOLARSHIP FUND
(\$1,720)
THE DANIEL VAN VOORHIS SCHOLARSHIP FUND (\$500)
THE CHARLES G. WATERS SCHOLARSHIP FUND (\$17,495)
THE CHARLES GARDNER WATERS AND CLARA FERRIS WATERS SCHOLAR-
SHIP FUND (\$30,036)
THE WELSH HILLS PRICES SCHOLARSHIP FUND (\$2,000)
THE WHISLER FAMILY SCHOLARSHIP FUND (\$30,000)
THE KATHERINE GEAR WIGHTMAN SCHOLARSHIP FUND (\$500)

GRANTS AND SCHOLARSHIPS FOR MEN

THE MARIA T. BARNEY SCHOLARSHIP FUND (\$11,000)
THE A. F. AND A. A. BOSTWICK SCHOLARSHIP FUND (\$1,000)
THE HARRY THURSTON CRANE SCHOLARSHIP FUND (\$5,000)
THE DAVID AND JANE HARPSTER FUND (\$5,000)
THE HAWES KEY CLUB SCHOLARSHIP FUND (\$2,314)
THE JOHN H. HISLOP MEMORIAL SCHOLARSHIP FUND (\$25,000)
THE EUGENIO KINCAID LEONARD SCHOLARSHIP FUND (\$1,000)
THE WILLIAM E. MILLER AND ANNIE SCHEIDLER MILLER MEMORIAL
SCHOLARSHIP FUND (\$10,000)
THE MARY ARNOLD STEVENS FUND (\$500)
THE ROBERT VANDERVEER, JR. MEMORIAL SCHOLARSHIP FUND (\$3,000)

GRANTS AND SCHOLARSHIPS FOR WOMEN

- THE CHARLES T. CHAPIN SCHOLARSHIP FUND (\$2,000)
- THE HARRY THURSTON CRANE SCHOLARSHIP FUND (\$5,000)
- THE IDA SAUNDERS FISHER SCHOLARSHIP FUND (\$2,000)
- THE FLORA PRICE JONES SCHOLARSHIP FUND (\$1,000)
- THE J. W. KING SCHOLARSHIP FUND (\$12,000)
- THE HANNAH SNOW LEWIS SCHOLARSHIP FUND (\$16,000)
- THE LIDE-SHEPARDSON-MARSH SCHOLARSHIP FUND (\$1,000)
- THE MARTHA A. LUSE SCHOLARSHIP FUND (1,000)
- THE JAMES MCCLURG SCHOLARSHIP FUND (\$1,000)
- THE MARY MILLER SCHOLARSHIP FUND (\$8,282)
- THE MORTAR BOARD SCHOLARSHIP FUND (\$600)
- THE PHILOMATHEAN SCHOLARSHIP FUND (\$1,000)
- THE AGNES WILSON WEAVER SCHOLARSHIP FUND (\$1,000)

GRANTS AND SCHOLARSHIPS FOR
PREMINISTERIAL STUDENTS

- THE CHARLES EDWIN BARKER SCHOLARSHIP FUND (\$1,000)
- THE WILLIAM HOWARD DOANE SCHOLARSHIP FUND (\$10,000)
- THE M. E. GRAY FUND (\$5,000)
- THE ABIGAIL T. HOUCK FUND (\$31,717)
- THE JOSHUA AND GWENNIE JONES FUND (\$1,357)
- THE MARY K. MONROE FUND (\$30,000)
- THE DAVID THATCHER FUND (\$1,500)

FUNDS INCREASED OR ESTABLISHED

The following changes in scholarship funds, since the 1958-60 catalog was printed, represent gifts received through March, 1960 or funds with income now available:

THE MARY F. AND FRED W. BENJAMIN MEMORIAL FUND (\$1,000)

The income from this fund is to be used to help some deserving and needy young man or woman complete his or her education at Denison University. The fund was established by the Benjamin Family in memory of their mother and father.

THE SAMUEL B. BRIERLY SCHOLARSHIP FUND (\$276,266)

This fund was increased by an anonymous gift of \$100.

THE DENISON MEMORIAL SCHOLARSHIP FUND (\$840)

This fund was started by a gift of \$247 from the Class of 1955 and increased by a gift of \$218 from the Class of 1958 and \$375 in gifts in memory of various friends of Denison.

THE MINNIE FARNER MILLER SCHOLARSHIP FUND (\$500)

The annual income from this fund is to be used to help some deserving Denison student. The fund was established by Mrs. Eugene Exman in memory of her mother.

THE H. RHODES HUNDLEY MEMORIAL SCHOLARSHIP FUND (\$500)

The income from this fund is to be used to aid deserving Denison students. The fund was established in memory of Dr. Hundley who served as Dean of Doane Academy from 1900 until it was discontinued in June, 1927.

THE WILLIAM E. MILLER AND ANNIE SCHEIDLER MILLER MEMORIAL SCHOLARSHIP FUND (\$10,000)

The income from this fund is to be used to aid a worthy and needy graduate of the Senior High School of Newark, Ohio, preferably a young man, recommended by the Principal and approved by the Denison Committee on Scholarships. The fund was established by the trustee of the William E. Miller and Annie Scheidler Miller Foundation, Emerson R. Miller, in memory of his parents.

THE LAVERNE NOYES SCHOLARSHIP FUND (\$45,508)

The final distribution of \$10,236 from the Estate of LaVerne Noyes makes the total in this fund \$45,508.

THE PEOPLES STATE BANK SCHOLARSHIP FUND (\$1,000)

This fund was started by an initial gift of \$1,000 from The Peoples State Bank of Granville. The income from the fund is to be used to aid students majoring in Economics.

THE GEORGE M. AND HARRIETTE McCANN ROUDEBUSH SCHOLARSHIP FUND (\$18,494)

Additions amounting to \$2,902 make the new total in this fund \$18,494.

THE CHAPLAIN THOMAS B. VAN HORNE MEMORIAL SCHOLARSHIP FUND (\$1,720)

The income from this fund is to be used to aid deserving students. The fund was established by a gift from Mr. Aaron DuBois in memory of a Denison faculty member in 1848.

THE HAWES KEY CLUB SCHOLARSHIP FUND (\$2,314)

This fund was increased by gifts totaling \$585.

THE ROBERT WILSON VANDERVEER, JR., MEMORIAL SCHOLARSHIP FUND (\$3,000)

The income from this fund is to be used to aid men students at Denison. The fund was established by the posthumous gift of Wilson Vanderveer in memory of his son.

THE PHILOMATHEAN MEMORIAL SCHOLARSHIP FUND (\$1,000)

The income from this fund is to be used to aid women students at Denison. It comes from a gift of \$317.24 from the Philomathean Society in 1928.

LOAN FUNDS AVAILABLE

Loans are available to worthy students who have completed at least one semester of residence. A loan may be used only to defray expenses specifically pertaining to a college education. The applicant is required to furnish information regarding the purpose of the loan, any outstanding obligations to the college or to other sources, the amount of financial aid received from his parents or guardian, the total sum earned annually toward his college expenses, and the amount of life insurance carried. The promissory note must be made and co-signed by a parent or guardian, *not* by a fellow student or a faculty member. The application blank should be obtained from the Dean of Men or the Dean of Women.

Approximately \$20,000 for student loans is available from the following established funds:

The Fletcher O. Marsh Fund
The Edward LeGrand Husted Fund
The Ida S. Fisher Loan Fund
The C. L. Williams Alumni Loan Fund
The Class of 1927 Loan Fund
The Asher King Mather Loan Fund
The Edward Gear Ewart Loan Fund
The Charles F. Burke Memorial Loan Fund
The Avery A. Shaw Memorial Loan Fund
The W. C. Woodyard Loan Fund
The Burton Memorial Loan Fund
The Joseph M. and Amy W. Collins Loan Fund
The Miller-Exman Loan Fund
The Millard Brelsford Memorial Loan Fund
The Barrett Loan Fund

Denison University participates in the National Defense Student Loan Program under Title II of the National Defense Education Act of 1958 (Public Law 85-86.4).

ADDITIONAL SOURCES, such as foundations, fraternities, and sororities, make scholarship and loan funds available to Denison students. Information may be obtained by addressing the Cashier of the University or the Secretary of the Denison Board of Trustees, Granville, Ohio.

ACADEMIC HONORS AND PRIZES

GRADUATION WITH HONORS

GRADUATION WITH HIGHEST HONORS is the distinction accorded a student who earns a cumulative grade-point average of 3.7 for the last six semesters and receives an A grade on both his Honors Project and the Comprehensive Examination.

GRADUATION WITH HIGH HONORS is the distinction accorded a student whose cumulative grade-point average is 3.5 for the last six semesters and who earns an A grade either on his Honors Project or on the Comprehensive Examination and at least a B grade on the other.

GRADUATION WITH HONORS is the distinction accorded a student whose cumulative grade-point average is 3.5 for the last six semesters and receives an A grade on the Comprehensive Examination, or who earns a cumulative grade-point average of 3.0 for the last six semesters and at least a B grade on both the Comprehensive Examination and his Honors Project.

DEAN'S LIST OF ANNUAL HONORS

A student earning a cumulative grade-point average of 3.0, provided no grade in his year's record is below C, is placed on the Dean's List. Those attaining this honor are given public recognition at an annual convocation.

HONORARY SOCIETIES

The Phi Beta Kappa Society, founded in 1776 to recognize and encourage scholarly pursuits, established the Theta of Ohio chapter at Denison in 1911. Annually new members are elected from students in the junior or senior classes ranking highest in scholarship.

The Phi Society, an organization for encouraging high scholarship among freshmen, was founded by the Theta of Ohio chapter of Phi Beta Kappa in 1926. A student is required to earn at least 112 grade-points during the freshman year to be considered for this honor.

Organizations with chapters of national honorary societies at Denison include Alpha Epsilon Delta, premedical; Crossed Keys,

junior women's service; Delta Phi Alpha, German language; Eta Sigma Phi, classical language; Kappa Delta Pi, educational; Mortar Board, senior women's leadership; Omicron Delta Kappa, senior men's leadership; Phi Alpha Theta, history; Pi Delta Epsilon, publications; Pi Delta Phi, French language; Pi Sigma Alpha, political science, Psi Chi, psychology; Sigma Delta Pi, Spanish language and Tau Kappa Alpha, forensic.

Honorary organizations, local in nature, are Air Honor Society, military; Alpha Rho Tau, art; Chemical Society; D Association, athletic; Dance Club, modern dance; Lambda Mu, women's music; Mu Sigma, men's music; Franco-Calliopean Society, creative writing; Rho Beta Chi, radio broadcasting; and Masquers and University Players, theatre honoraries.

ENDOWED PRIZES AND AWARDS

Recognizing that true culture is largely the result of individual effort, Denison University offers a number of prizes to reward students for special excellence. Students are eligible to compete for the following prizes: (See also Honor Scholarships.)

THE THOMAS HAMILTON CROCKER AWARD (\$1,000)

The income from this fund provides an annual award to the student who excels in the oral interpretation of literature as a function of the Department of Speech. This award was established as a memorial to their son by Lionel G. Crocker, professor of speech at Denison University, and Mrs. Geraldine Hamilton Crocker, M.D.

THE SAM GELFER MEMORIAL MUSIC AWARD (\$2,175)

The income from this fund is awarded annually to one or more students, irrespective of race, creed, or color, preferably to players of stringed instruments, providing they have demonstrated excellence in music and have contributed through their music to the University and the community. Selection is made by the Music faculty of the University. The award was established by Licking County, Ohio, friends of Sam Gelfer and by gifts from former students.

THE JOHN L. GILPATRICK MATHEMATICS AWARD (\$1,117)

The income from this fund in memory of a former head of the Department of Mathematics provides an annual award to a member of the senior class recommended by the faculty of the Department of Mathematics for excellence in that subject.

THE LELAND J. GORDON ALUMNI PRIZE IN ECONOMICS (\$1,860)

A prize of \$100 is awarded annually to the student enrolled in Economics 414 who prepares the best original thesis dealing with a significant problem in economics. The papers are judged by persons outside of the Department. Former students and friends of Professor Gordon have contributed to endow this prize.

THE LOUIS KUSSMAUL FRIENDSHIP AWARD (\$1,800)

This annual award of \$90 is made to the student who has done the most to foster friendly relations between the town and the college. Selection is made by the President of the Granville Retail Merchants Association and the President of Denison University. This award was established by Harry W. Amos, Class of 1899, and is maintained by his bequest.

THE ANNIE MacNEILL POETRY PRIZES (\$2,000)

Two endowed prizes are awarded: (1) To the student with high standing in English who is judged by the Department of English the most proficient in the writing of poetry, and (2) To the junior or senior who ranks highest in the course devoted to the study of Victorian poets.

THE CONRAD E. RONNEBERG AWARD (\$750)

The income from this Fund is designed for the aid of foreign students at Denison whose need can not be cared for by help from other funds available at the University. The Alumnus who is establishing this fund was himself a student from another land.

THE DANIEL SHEPARDSON MEMORIAL AWARD (\$2,500)

The income from this sum is awarded to the junior woman showing promise of outstanding leadership in the field of religious activity. Selection is made by the alumnae group administering the fund.

THE SPERRY AND HUTCHINSON ECONOMICS AWARD (\$2,500)

This award was established by a gift from the Sperry and Hutchinson Company in November, 1959. The income from the fund is to be used to provide an annual award for scholastic achievement by majors in the Department of Economics and is to be administered by the chairman of the department in consultation with his colleagues.

THE SAMSON TALBOT BIBLE READING CONTEST (\$1,000)

This is an endowed fund yielding prizes of \$25, \$20, \$10, and \$5 for the best reading of the Scriptures. This annual contest is open to seniors and juniors.

THE FORBES B. WILEY MEMORIAL MATHEMATICS AWARD (\$1,584)

An annual award provided by the income from this fund is given to a member of the sophomore class recommended by the Department of Mathematics for excellence in that subject. This fund has been established by friends and members of the family as a memorial to a former chairman of the department.

THE C. L. WILLIAMS MEMORIAL AWARD (\$1,000)

This fund was established by Burt T. Hodges in memory of Charles Luther Williams, professor of English (1894-1921). The income from the fund is used to aid students, contributing through active participation, to some phase of the religious program of the University or the community.

THE WOODLAND CHEMISTRY PRIZES (\$5,000)

A first and second prize, amounting to \$150 and \$50, are awarded annually to two junior students in regular standing who prepare, under the direction of the chairman of the Department of Chemistry, the best theses on some phase of chemistry in its relationship to industrial or everyday life. These prizes were established as a memorial to William Henry Woodland in a bequest by his son, J. Ernest Woodland of the Class of 1891.

NON-ENDOWED PRIZES AND AWARDS**THE AMERICAN INSTITUTE OF CHEMISTS MEDAL**

A bronze medal is given by the Ohio Chapter of the American Institute of Chemists to be awarded to an outstanding chemistry major who has signified his intention of entering the field of chemistry professionally. The winner is selected by the Department of Chemistry.

THE DONALD BLISS ATWELL MEMORIAL PRIZE

This annual prize of \$50 is given for some outstanding effort on the part of any junior or senior student in the field of Social Ethics. This prize was established by friends and members of the family as a memorial to Donald B. Atwell of the Class of 1917 in recognition of his record of service to youth as a YMCA secretary both in this country and abroad. Selection of the recipient will be made by the Department of Philosophy.

THE DAVID A. CHAMBERS BIOLOGY PRIZE

This annual award of \$200 goes to a member of the junior class on the basis of superior interest and excellence in the field

of biology. This prize was established by a Cleveland physician, Charles E. Kinney, M.D., in honor of a Cleveland surgeon, David A. Chambers, M.D., Class of 1923. Selection of the recipient is made by the chairman of the department and two other members of the faculty named by the President of the University.

THE TILESTON F. CHAMBERS ENGLISH PRIZE

A book prize is awarded annually to the senior major in the Department of English whose comprehensive examination on American and English writers is judged the most interestingly written. This prize, originally offered by T. F. Chambers, former member of the Board of Trustees, is now maintained by his son, David A. Chambers, M.D., Class of 1923.

CHI OMEGA SOCIAL STUDIES PRIZE

A prize of \$25 is awarded to the senior woman with the highest scholastic standing concentrating in a designated field of social studies, including a major in economics, government, history, sociology, or a transdepartmental major. The prize is offered annually by the Delta Gamma chapter of Chi Omega.

THE DELTA PHI ALPHA BOOK PRIZE

A book prize is awarded to the student in the Department of Modern Languages whose work in the German language has been outstanding. The book is the gift of the local chapter of the German language honorary fraternity, Delta Phi Alpha.

THE EBAUGH AWARD

This award, to encourage postgraduate study, entitles the outstanding senior majoring in chemistry to a membership in the American Chemical Society. The award was established in memory of William Clarence Ebaugh, a former chairman of the Department of Chemistry.

THE FRESHMAN CHEMISTRY PRIZE

A book prize is awarded annually by the Denison Chemical Society to the highest ranking Freshman in General Chemistry 111-112.

THE ROBERT W. LEVERING AWARD

This annual award of \$50 is made to the debater judged the best by the faculty of the Department of Speech. The award was established in 1959 by the Honorable Robert W. Levering, M.C., Class of 1938.

THE LEWIS LITERARY PRIZE CONTEST

Four prizes, totaling \$100, are awarded to the four men ranking the highest in the annual contest for excellence in public speaking. The prizes were originally presented to the Franklin and Calliopean Literary Societies by Charles T. Lewis, former president of the Board of Trustees. They were continued by his son, Howard Lewis of the Class of 1900, and now by the grandson, Melvin P. Lewis.

THE MERCK AND COMPANY AWARDS IN CHEMISTRY

Two copies of the *Merck Index*, a reference work covering principally biological and medicinal chemistry, are presented to the Department to be awarded to one senior and one junior for recognition of excellent work and to encourage an interest in chemistry. Recipients are selected by the Department of Chemistry.

THE CLASS OF 1954 SCHOLASTIC TROPHY (Military)

This trophy is awarded to the graduating advanced AFROTC cadet with the highest overall cumulative four-year grade-point average.

OTHER AFROTC AWARDS

AFROTC cadets who are outstanding in the basic and advanced courses are eligible for consideration for various military awards of merit and medals by the Chicago Tribune, Consolidated Vultee Aircraft Corporation, Republic Aviation Corporation, Reserve Officers' Association, and Sons of the American Revolution.

THE PHI BETA KAPPA SCHOLARSHIP AWARDS

In 1954 the Theta of Ohio chapter of Phi Beta Kappa at Denison University established three special scholarship awards. Two rotating scholarship cups are awarded each semester to the fraternity and to the sorority having the highest academic standing in all subjects. An annual award of books valued at \$15 is made to the highest ranking student at the end of his sophomore year.

THE LAURA F. PLATTS SCHOLARSHIP AWARD

This annual award of \$60 is made to a senior woman who gives unusual promise of service to mankind. Selection is based on her college record.

THE PSI CHI BOOK PRIZE

A book prize is awarded to the senior in the Department of Psychology whose term paper is selected as outstanding by the faculty of the Department. The prize is made by the local chapter of the national honorary fraternity, Psi Chi.

THE RAY SANFORD STOUT ENGLISH PRIZES

Two prizes, \$20 and \$10, are awarded annually for excellence in short story writing. Manuscripts should be submitted to the chairman of the Department of English. These awards were established by Henry S. Stout of the Class of 1915 in memory of his mother.

THE JUDGE CLYDE S. SHUMAKER TROPHY

This trophy for excellence in public speaking has been established by Judge Clyde S. Shumaker of the Class of 1930. Selection of the recipient is made by the Department of Speech.

THE SIGMA DELTA PI MEDALS

Three official awards of the American Association of Teachers of Spanish and Portuguese are offered by the Denison chapter of Sigma Delta Pi: (1) To the student making the best record in Elementary Spanish, and (2) To the two students making the best record in Second-year Spanish.

THE CHARLES EDWARD SILBERNAGEL MEMORIAL PRIZE

This annual prize of \$125 is awarded to the senior premedical student who, in the judgment of the adviser to premedical students, has shown the greatest aptitude in premedical subjects. The recipient must have been admitted to the first year of a Class A Medical School. The prize was established by Wynne Silbernagel, M.D., Class of 1926, and his mother, Mrs. O. C. Weist, in memory of Dr. Silbernagel's father.



WILLIAM HOWARD DOANE LIBRARY

THE PLAN OF STUDY

Denison offers a plan of study which gives a student the general knowledge desirable for intelligent living and the specialized knowledge needed for vocational achievement. This plan allows the student a wide range of choice under the guidance of faculty and administrative personnel. (See Student Services.) The degree earned may be Bachelor of Arts, Bachelor of Science, Bachelor of Science in Education, Bachelor of Music, or Bachelor of Fine Arts.

DEGREE IN ARTS OR SCIENCE

A student who satisfies the following requirements will receive the degree of *Bachelor of Arts*, except that a student who majors in one of the natural sciences, (Astronomy, Biological Sciences, Chemistry, Geology, Mathematics, Physics, or Psychology) may elect to receive the degree of *Bachelor of Science*. To obtain either of these degrees the student must satisfy the following conditions:

He must earn 124 semester-hours of credit including the Courses in General Education, the Field of Concentration and Physical Education, plus Convocation and Chapel credit, or its equivalent. A student seeking certification to teach must also take required courses in Education.

His work must conform to certain scholastic requirements. These include a specified *grade-point average* in courses, the passing of a *comprehensive examination* in his field of concentration, and satisfactory scores on the *Graduate Record Examination*. He must show *proficiency in English*.

A student who meets these requirements with an outstanding record is eligible to become a candidate for a degree *with Honors*.

Detailed requirements in all of these areas are explained in the following sections:

SPECIFIED REQUIREMENTS

COURSES IN GENERAL EDUCATION (See General Education) must be completed by every student. These basic course requirements will be adjusted for an upperclass student transferring to Denison. In some instances, courses he has previously taken will be accepted as the equivalent of the Denison requirements.

THE FIELD OF CONCENTRATION enables the student to specialize in a particular field of learning, either in one department or in two or more departments.

A CANDIDATE FOR THE BACHELOR OF ARTS DEGREE may concentrate in any of the following fields: Area Studies (The Americas, France, or Germany—Transdepartmental), Art, Astronomy, Biological Sciences (Botany or Zoology), Business (see Economics), Chemistry, Classical Languages, Economics, English (in Literature and in Writing), Geology, Government, History, Mathematics, Modern Languages (French, German, or Spanish), Music (see also Bachelor of Music degree and Bachelor of Music degree in music education), Philosophy, Personnel Administration (see Psychology), Physical Education, Physics, Psychology, Religion, Social Studies (trans-departmental), Sociology, Speech, and Theatre Arts.

A CANDIDATE FOR THE BACHELOR OF SCIENCE DEGREE may concentrate in any of the following fields: Astronomy, Biological Sciences (Botany or Zoology), Chemistry, Geology, Mathematics, Physics, and Psychology.

A student who concentrates (or majors) in one department must successfully complete from 24 to 36 semester-hours of work with at least a C average in the department chosen. If the student earns credit in a given department in excess of 36 semester-hours, the

excess must be in addition to his normal graduation requirement. Exceptions in certain departments permit the major to earn more than 36 credits. (See explanations under Departmental Courses.)

A student who wishes to concentrate in a general field, rather than one department, shall take a minimum of 36 semester-hours with at least a C average from two or three closely related departments, with not less than 15 semester-hours, ordinarily in sequence, in one of these departments. (See also the Transdepartmental Majors.) A student who wishes to avail himself of the privilege of concentrating in a general area must make his choice not later than the beginning of the junior year. Ordinarily the choice of a major in a single department is also made not later than the beginning of the junior year.

Each department shall appoint an Adviser for each student whose field of concentration is within that department. An appropriate faculty representative who will outline a suitable sequence of courses will be appointed for each student whose field of concentration crosses departmental lines. Such appointments will be made by the Dean of the College in consultation with the chairmen of the departments concerned.

Each student is urged to make definite choice of a field of concentration before entering his junior year. *If a student decides to change his field of concentration during his junior year, he may be required to take an extra semester to meet graduation requirements. Any student who changes his field of concentration during his senior year will ordinarily be required to take at least one extra semester to meet graduation requirements.*

PHYSICAL EDUCATION of one credit-hour is required each semester in the freshman and sophomore years except for those students who elect the AFROTC program. A student who successfully completes the first two years (basic program) of AFROTC is required to enroll for only one year of Physical Education, which may be taken in either the freshman or the sophomore year. Upon successful completion of the first two years (basic program) of AFROTC, a student who chooses to take only one year of Physical Education will be granted an additional two hours' credit toward graduation. *Any student who is excused from the Physical Education requirement for reasons of health must earn an equivalent amount of credit in other courses. (For credit in military service see Physical Education under Departmental Courses.)*

CONVOCATION AND CHAPEL ATTENDANCE are recognized at the rate of one-half credit-hour for each semester of weekly Convocation attendance and one-half credit-hour for each semester of weekly Chapel attendance, providing the record shows the student has been present for 75 per cent of the programs or services. *Any student who does not accumulate such credit in any semester must earn for graduation an equivalent amount of credit in elective courses.*

ELECTIVE COURSES of study may complete the total number of semester-hours of credit to satisfy the graduation requirements. Both the student and his adviser shall strive constantly to choose the courses that will tend to develop a well-rounded and balanced personality. Lack of acquaintance with a subject or a field constitutes a strong reason for undertaking its study.

BACHELOR OF FINE ARTS DEGREE

A student who satisfies the prescribed requirements will receive the degree of *Bachelor of Fine Arts*. The field of concentration shall be Art or Theatre Arts.

A candidate for the degree of Bachelor of Fine Arts must take a minimum of 36 semester-hours of General Education courses excluding General Education 31, 32, and 33 (see Forms of Fine Arts under Courses of Study). These courses must include General Education 11-12 and a laboratory science. Other General Education courses to be taken should be determined through consultation with the faculty adviser. If a student elects an 8-hour science course, 38 hours of General Education will be required. (See Courses in General Education.)

No less than 44 nor more than 50 semester-hours shall be acceptable in the major field. The remainder of the 132 semester-hours required for the degree shall consist of elective courses taken from the departmental and general education offerings (not more than 14 semester-hours of which may be in departments other than his own which share in the Bachelor of Fine Arts program), 4 hours of Physical Education, and Chapel and Convocation (see Specified Requirements).

BACHELOR OF SCIENCE IN EDUCATION

The student who majors in Education shall normally meet the same requirements as stated above for students who major in other departments. (See under Degree in Arts or Science.) He shall complete from 27 to 36 semester-hours of credit in Education with at least a C average.

The field of concentration shall be Education or Physical Education.

A student who satisfies the prescribed requirements will receive the degree of *Bachelor of Science in Education*.

SECONDARY SCHOOL TEACHING

A teaching certificate that will permit a student to teach in grades seven through twelve is issued to any qualified student providing he meets the requirements for a degree at Denison, the requirements of the Department of Education of Ohio and the State in which he plans to teach, and achieves a satisfactory rating on a psychological test and on tests in English, handwriting, vocabulary, and speech.

In Ohio, as in most states, a student usually earns certification in two different teaching areas. Certification, in at least two areas, is desirable to facilitate placement. One of these teaching areas will be the area in which the student majors for graduation. In addition to the courses required for the teaching areas, each prospective teacher must take 18 semester-hours of credit in Education. The State Department of Education in Ohio prescribes Education 213, 217, 420, a course in Methods of Teaching (either in a teaching area or in Education 326) and Student Teaching.

A student interested in teaching should consult the Department of Education as early as possible. Early planning will help him to meet the requirements for certification in any state in which he may wish to teach.

DEGREES IN MUSIC

A student who desires to earn any of the following degrees in Music should make this decision known, if possible, when he is admitted to Denison, and certainly not later than the end of the freshman year.

BACHELOR OF MUSIC

The regular undergraduate plan of study extending through four academic years leads to the *Bachelor of Music* degree if the student satisfies the following requirements:

SPECIFIED REQUIREMENTS including proficiency in English, and required Physical Education. (See Scholastic Requirements below.)

FIELD OF CONCENTRATION requires 30 semester-hours of credit of all students in Fundamental Musicianship, Harmony, Advanced Musicianship, History of Music, and Form and Analysis. (See Department of Music.)

MAJOR IN APPLIED MUSIC requires (in addition to English, Physical Education, and the 30 semester-hours in the Field of Concentration), the following:

1. Ten semester-hours of Counterpoint, Composition, or additional music courses.
2. Forty-eight hours in Applied Music. (See Music Curriculum.)
3. Electives in other academic subjects of 26 hours to complete the required total of 124 semester-hours plus chapel or convocation credits or their equivalent.
4. A recital in the field of the major is required.

General Education course requirements are waived because of the greater concentration in music; however, the student is advised to distribute his electives among the general education courses. (See Courses in General Education.)

BACHELOR OF ARTS WITH MUSIC MAJOR

REQUIRED COURSES for a Bachelor of Arts degree with a Music major include Music 111-112, 121-122, 201, 202, 211-212, 221-222, 311-312, and 10 semester-hours in Applied Music. The performance of a graduating recital or the composition of a work of major proportions such as a Sonata or String Quartet is required. A student may complete the requirements for the degree from other academic departments.

A student planning to teach in the public schools is required to take Music 303-304 and may include Instrumental class instruction in the subject he plans to teach. Courses in Education and in Methods are considered academic subjects in computing total semester-hours of credit.

BACHELOR OF MUSIC (MUSIC EDUCATION)

The regular undergraduate plan in preparation for public school music teaching extends through the four academic years and leads to the degree of *Bachelor of Music (music education)* and the Ohio Provisional Special Certificate (Music) if the student satisfies the following requirements:

SPECIFIED REQUIREMENTS include

- A. MUSIC AND MUSIC EDUCATION (68 hours)
 - 1. Music Education Methods, 8 hours (Education 315, 316)
 - 2. Instrument and Voice Classes, 6 hours (Music 141, 142, 151, 152, 161, 162)
 - 3. Music Courses, 10 hours (Music 201-202; 303-304; 305, 306)
 - 4. Music Theory, 24 hours (Music 111-112; 211-212; 121-122; 221-222; 311-312)
 - 5. Applied Music, 16 hours (two hours each semester throughout the four years)
 - 6. Music Ensembles, 4 hours (Music 103, 104, 203, 204)
- B. EDUCATION (15 hours)
(Education 213, 217, 415-416, 420)
- C. LIBERAL ARTS AND ELECTIVES (33 hours)
 - 1. Required Courses, 9 hours (General Education course 11-12, Psychology 211)
 - 2. Suggested Courses, 6 hours (General Education course 21-22, or History 221-222, or Government and History 221 or 222)
 - 3. Science and/or Mathematics, 6 hours
 - 4. Religion and/or Philosophy, 6 hours
 - 5. Electives, 6 hours
- D. PHYSICAL EDUCATION (4 hours)
- E. CONVOCATION (4 hours) and CHAPEL (4 hours)

The comprehensive examination of this degree will be divided between music and music education. Piano proficiency requirements must be met at the time of the comprehensive examination.

DIPLOMA IN PERFORMANCE

A DIPLOMA IN APPLIED MUSIC is granted to the student who fulfills the requirements as outlined for a degree in music and upon recommendation of the Conservatory of Music faculty presents a public recital in his senior year.

SCHOLASTIC REQUIREMENTS

PROFICIENCY IN ENGLISH is required for graduation. A student whose grade in General Education 11 or 12 is a D must do work in the English laboratory until such time as his writing is judged by the English Department to be proficient.

THE GRADE-POINT SYSTEM in force at Denison is as follows:

- A (*Excellent*) 4 points for each credit-hour.
- B (*Good*) 3 points for each credit-hour.
- C (*Fair*) 2 points for each credit-hour.
- D (*Passing*) 1 point for each credit-hour.
- F (*Failure*) 0 points for each credit-hour.
- I (*Incomplete*)
- WF (*Withdrawn Failing*)
- WP (*Withdrawn Passing*)

Incomplete is recorded only upon recommendation of the instructor and approval of the appropriate Dean of Students in cases of illness or other emergencies. The student will be granted an extension of time to complete the course but *normally no later than the middle of the next semester in residence.*

No grade will be recorded if a student receives permission to withdraw from a course before the end of the second week of classes.

Withdrawn Failing or *Withdrawn Passing* is recorded when a student officially withdraws from a course during the third, fourth, or fifth week of a semester without incurring an academic penalty. Thereafter, a WF or WP shall count as a Failure. However, if a student withdraws from the University, no courses are entered on his permanent record.

ACADEMIC PROBATION is recorded for a student whose cumulative grade-point average is less than 2.0 at the end of any semester. His probation will be continued until his cumulative grade-point average is 2.0 or above. While on academic probation, he may be permitted to enroll in succeeding semesters for a limited schedule to be determined by his Adviser with the approval of the Committee on Academic Status.

Any student who falls below a 1.0 grade-point average in any one semester will be suspended.

RESIDENCE REQUIREMENT. To be a candidate for a Denison degree a student who enters Denison as a freshman must complete six semesters at Denison, and a transfer student must complete the last two full years (or the last four semesters) at Denison. All students, except those in recognized pre-professional 3-2 programs, must complete the last two semesters at Denison. Exceptions will be made only by the Executive Committee.

JUNIOR STANDING for a student on academic probation at end of his sophomore year shall be obtained only through petition to and favorable action by the Committee on Academic Status.

SPECIAL STUDENT. Registration as a special student is open to persons living within commuting distance of Granville, to certain foreign students who wish to take or audit courses of special interest to them but are not interested in a degree, and to certain graduates wishing to take post-graduate work. A special student may not register for more than six hours of academic credit except by permission of the Committee on Academic Status. If academic credit is desired, appropriate credentials must be submitted to the Registrar.

ACADEMIC SUSPENSION results if a student fails to earn a C average while on academic probation. However, if a student's grade-point average is less than 2.0 for the fall semester and he has been on academic probation for that semester, he may petition the Committee on Academic Status for permission to enroll for the spring semester. If during this semester, he does not reduce his point deficiency by one-half, he will be ineligible to return in the fall.

A student suspended from Denison may become eligible for re-admission by petition to and favorable action by the Committee on Academic Status. This petition should be in the form of a letter to the appropriate Dean of Students. Bases of Committee action will be the student's previous overall record, his experience since suspension, and quality of work taken elsewhere.

READMISSION TO THE UNIVERSITY. A former Denison student, who was in good academic and social standing when he left the University, may be readmitted to Denison by writing to the appropriate Dean of Students and by repayment of the \$25 registration deposit. A former student who is not in good standing and who wishes to re-enroll must petition the Committee on Academic Status, the petition to be submitted through the office of the appropriate Dean of Students.

GRADUATION. To be eligible for graduation a student must have a cumulative grade-point average of at least 2.0. This means that his entire cumulative record, including courses passed, failed, repeated, left incomplete, must average at least 2.0.

THE GRADUATE RECORD EXAMINATION, as part of the series of nationally used achievement tests in General Education, is required of every student in the senior year. The test scores, which are interpreted to the student, give valuable information as to his standing with reference to students in several hundred colleges and universities throughout the country, and in comparison with his Denison classmates. *The scores are required for admission to most graduate and professional schools, and are increasingly requested by industrial and commercial firms considering students for employment.*

A senior whose scores on the Graduate Record Examination fall in the lower percentiles may expect his total record at Denison to be carefully considered.

Any senior who fails to appear for the Graduate Record Examination, unless excused by reason of illness or other emergency, will forfeit all credit for the semester in which the examination is offered.

THE COMPREHENSIVE EXAMINATION is used to measure the ability of a student to correlate his knowledge effectively. During his senior year, a student shall be examined on his command of the facts and principles in his field of concentration and on his ability to use this knowledge in new situations. At the discretion of the department or departments concerned, a part of the comprehensive examination may take the form of a recital, thesis, or project. *The comprehensive examination must be passed in its entirety if the student is to be graduated.*

The comprehensive examination will be arranged by the student's Adviser in cooperation with the other members of the department. The comprehensive examinations of transdepartmental majors will be arranged by the student's Adviser and such members of the departments involved as the Dean of the College in cooperation with the departmental chairmen shall designate.

PRIVILEGES OPEN TO SUPERIOR STUDENTS

To encourage superior students to make the most of their abilities, Denison offers a number of special opportunities.

ADVANCED PLACEMENT is a recently developed program to give recognition to the student who takes college-level courses in secondary

school. Denison welcomes such a student who may be excused from certain college requirements by satisfactorily passing the Advanced Placement Examinations of the College Entrance Examination Board in any of the following: English Composition, Literature, Foreign Languages, American History, European History, Biology, Chemistry, Physics, and Mathematics.

Credit will be given to a student who completes Advanced Placement Examinations with scores of 4 or 5. Credit may be given for a score of 3 upon recommendation of the Director of Testing and Vocational Services.

PROFICIENCY EXAMINATIONS are regularly scheduled by the Office of Testing and Vocational Services at the beginning of each academic year at Denison. When a student demonstrates by examination his grasp of the subject matter of any course in General Education, he will be excused from taking that course by the Director of Testing and Vocational Services.

REGISTRATION IN EXCESS of 18 hours a semester without the payment of additional tuition may be permitted to a student whose grade-point average is at least 3.5 and who is recommended to the Committee on Academic Status by his adviser or the departmental chairman as qualified to undertake extra courses. *Extra hours that have been taken without payment of tuition fees may not be used to permit a student to graduate in fewer than eight semesters.*

DIRECTED STUDY in the sophomore or junior year and Individual Work for Departmental Honors in the senior year permit the superior student to work intensively in areas of special interest. *A superior student is defined as one whose record during the three semesters preceding his application for Directed Study or Individual Work for Honors shows at least a 3.0 grade-point average with at least 3.4 in the field of concentration.* The chairman of a department is privileged, however, to recommend a student who has not met these requirements.

To undertake Directed Study a student must apply to his instructor for permission to pursue a subject of particular interest not already treated extensively in a regular course. On written approval of the instructor and the Dean of the College the student may register for from three to six hours of credit.

AN HONORS PROJECT may be undertaken by a senior who fulfills certain requirements. When recommended by his academic Adviser and

approved by the Curriculum Committee, the student investigates a selected topic in his field of concentration. If his work is of high quality, he will be granted six credits toward graduation. If in addition to receiving an honors rating on his project, he passes his comprehensive examination with a superior rating, he will be graduated with Honors. (See Graduation with Honors under Academic Honors and Prizes.) A student wishing to undertake an honors project should make application to the Dean of the College.

OFF-CAMPUS PROGRAMS

By petition to the Committee on Academic Status the superior student may qualify for one of the off-campus programs of study described below.

WASHINGTON SEMESTER PLAN is a means of introducing superior students from a limited number of colleges to the source materials and governmental institutions at Washington, D.C. An agreement for this purpose exists between Denison and the American University in Washington, D.C. Under this plan select students from Denison spend the first semester of their junior year (or other semester by special arrangement) at the School of Social Sciences and Public Affairs of the American University, receiving credit toward a degree from Denison.

This study includes three regular courses at the School of Social Sciences and Public Affairs of the American University, a seminar, and a directed, independent investigation on a subject of particular interest to the student. Under interinstitutional contract those participating in this plan continue to pay their tuition and room rent at Denison. While in Washington they meet their expenses for travel, meals, and incidentals directly. Application for the Washington Semester should be made to the chairman of the Department of Government but the plan is open to students interested in other major fields.

JUNIOR YEAR ABROAD, officially sponsored and supervised by recognized American colleges and universities, is open to any Denison student who meets certain requirements. *He must have completed 60 semester-hours of academic work with an overall average of B.* He must give evidence of adequate preparation in the foreign language needed, and be recommended by the appropriate Dean of Students and by the chairman of the department in which he is majoring at

Denison. He must arrange a program of study which meets the approval of his major adviser. Finally, his appointment must be approved by the Executive Committee of the Faculty. All information must be in the hands of the Committee by April 1.

A student interested in spending the year abroad should investigate carefully all of the other programs available in the country of his choice. If he plans to study independently, he should make a thorough investigation of the institution he wishes to attend.

All courses for which credit is to be given must be validated either by a transcript of credits, or by a certificate of satisfactory work, including the number of class hours and/or tutorial sessions attended. It is expected that students engaged in a program of independent study will take the course examinations at the university. Under the exceptional circumstances, for which approval is necessary, credit may be given by examination here. Thirty semester-hours a year will be the maximum for which Denison credit is given.

Upon his return to Denison the student must file with the Dean of the College and the chairman of his major department a report of his year abroad and his own evaluation of his educational experience in the foreign institution.

Any student who fails to comply with these procedures will be considered to have withdrawn voluntarily from the University. His return in a subsequent year will be dependent upon the availability of housing. In such a case, a request for transfer of credits from abroad will be considered by the Committee on Academic Status.

MERRILL-PALMER SCHOOL, Detroit, Michigan, offers an opportunity for a limited number of superior Denison students interested in work in the areas of human development and human relations with particular emphasis on family life. The student should plan to take one semester in residence in Detroit during either the junior or senior year. Application should be made to the chairman of the department in which the student is majoring or to the Dean of the College.

STUDENT EXCHANGE arrangements for Denison students, usually for one semester, are in effect with Hampton Institute, Howard University, and Fisk University. Students of high academic standing may apply for this program of intergroup relations which awards full credit toward a degree at Denison. The cost of a semester at one of these colleges involves little additional expense for the student other than travel. Application should be made to the adviser of the Intercollege Community Council of the Denison Campus Government Association.

COMBINED ARTS-PROFESSIONAL COURSES

Combined arts-professional courses enable the Denison student to obtain a degree *in absentia* if he has good reason to shorten the normal time required for a professional degree. Under certain conditions, Denison awards the bachelor's degree upon the successful completion of the first year in a recognized school of engineering, law, or medicine. To qualify for this privilege, a student must successfully complete the specified requirements for graduation at Denison with a total credit of *96 semester-hours, at the graduating rate of two or more points for each hour*. He must also successfully complete all the specified requirements for admission to a school of engineering, law, or medicine acceptable to the Denison faculty.

On this basis, a student may earn a bachelor's degree from Denison and a degree in engineering in five years; a bachelor's degree from Denison and a degree in law in six years; a bachelor's degree from Denison and a medical degree in seven years.

A student should recognize, however, that under present conditions of admission to professional schools, particularly medical schools, a candidate who has earned a bachelor's degree has a decided advantage, and that admission without a bachelor's degree is granted only to applicants of outstanding record.

COOPERATIVE ARRANGEMENT WITH THE UNIVERSITY OF CHICAGO

Students in certain fields may follow a continuing program leading to the bachelor's degree from Denison and the master's degree from the University of Chicago in a normal academic program of five years. In this program, a student spends his first three years at Denison and the last two at the University of Chicago. During his three years at Denison the student must complete all the specified requirements for graduation except that he need not take more than four semester courses in his field of concentration and may complete his major requirements in his first year at the University of Chicago. If he follows this plan, he will take his Denison comprehensive examination at the end of his fourth year. Upon satisfactory completion of his first year at the University of Chicago the student can normally expect to receive his bachelor's degree from Denison; and, upon satisfactory completion of his second year, the master's degree from the University of Chicago. Any student interested in this plan should consult the chairman of the department in which he wishes to do graduate work.

COOPERATIVE ARRANGEMENT IN FORESTRY

Denison University offers a program of forestry in cooperation with the School of Forestry of Duke University. Upon successful completion of a 5-year coordinated course of study, a student will hold the Bachelor of Science degree from Denison University and the professional degree of Master of Forestry from the Duke School of Forestry.

A student electing to pursue this curriculum spends the first three years in residence at Denison University and the last two years of his program at the Duke School of Forestry.

A candidate for the forestry program should indicate to the Director of Admissions of Denison University that he wishes to apply for the Liberal Arts-Forestry Curriculum. Admission to Denison is granted under the same conditions as for other curricula. At the end of the first semester of the third year the University will recommend qualified students for admission to the Duke School of Forestry. Each recommendation will be accompanied by the student's application for admission and a transcript of his academic record at Denison. No application need be made to the Duke School of Forestry prior to this time.

COOPERATIVE ARRANGEMENT IN ENGINEERING

In order to facilitate the combination of liberal arts and engineering education and to give students planning careers in engineering an opportunity to secure a broad basis for their specialized courses and thereby enhance their worth as engineers and as citizens, *Rensselaer Polytechnic Institute* and *Carnegie Institute of Technology* have entered into a combined arrangement with Denison for a five-year course. In this program, a student spends his first three years at Denison and the last two at either engineering college in accordance with the provisions described in the preceding section. Upon successful completion of the combined program, the student will hold both a bachelor's degree from Denison and a Bachelor of Engineering degree from R.P.I. or from Carnegie Tech. A similar arrangement is available with other approved colleges of engineering. In this program a student must complete all the specified requirements at Denison except that he need not take more than four semester courses in his major field at Denison. On this plan he may take his comprehensive examination at the end of his first year at an engineering school.



LIFE SCIENCE BUILDING

COURSES OF STUDY

Denison expects a student to achieve the specialization needed for success in his chosen vocation, and to acquire the general knowledge common to all well-educated persons. To these ends, a student is required to concentrate in one or more fields of learning (see Departmental Courses, kinds of majors) and to comply with the listed course requirements in General Education.

COURSES IN GENERAL EDUCATION

Every well-educated person needs certain skills and an understanding of the ideas, principles, and methods which are commonly used in the chief areas of modern knowledge. In recognition of this fact, many colleges in recent years have instituted a program of general education. These General Education courses are *basic* because they represent the common foundation of the curriculum which is required of every student *regardless of his field of specialization*. They are required in order that he may have a foundation upon which to build an enduring specialized career and in order that he may more intelligently assume his responsibilities as a citizen.

A number of the following General Education courses continue, with slight modification, courses which have long been offered in every college of liberal arts. Others cross traditional departmental lines to investigate broad areas of knowledge. All of them are designed to contribute to vocational success and to provide the skills, understanding, and sense of values necessary for intelligent living.

In a General Education course which extends through two semesters, the student is expected to earn credit in the normal sequence. Credit for the first semester will be withheld until the second semester is satisfactorily completed.

AIR FORCE ROTC trainees who complete the two-year basic program will be permitted to meet the Physical Education requirement by earning two hours' credit only.

Hyphenated courses are year courses; credit indicates amount to be earned each semester.

COMPOSITION

INTRODUCTION TO COMPOSITION AND LITERATURE 11-12

Mr. Marshall, Chairman (1960-63); Staff. 3

This General Education course offers practice in writing, mainly expository; training in the organization of ideas and in methods of research; and experience in analytical reading of major types of literature, ancient and modern. (To be taken in the freshman year, both semesters.)

ORAL COMMUNICATION

The following General Education courses train the student to present ideas effectively from a public platform. A student may choose either course.

A student majoring in Speech or in Theatre Arts may substitute a three-hour introductory course in either of these areas for General Education 10s or 10t.

PUBLIC SPEAKING 10s

Mr. Crocker, Chairman; Staff. 2

Introduction to the fields of speech activity: interpretation, debating, public speaking.

DRAMATIC INTERPRETATION 10t

Mr. Wright, Chairman; Staff. 2

Intensive work on voice and diction; dramatic interpretation of the best literature in essays, narratives, drama, and poetry.

HISTORY OF WESTERN CIVILIZATION

HISTORY OF WESTERN CIVILIZATION 21-22

Mr. Chessman, Chairman (1960-63); Staff. 4

An investigation of the origins and development of Western culture and institutions. (To be taken in the freshman or sophomore year.)

FORMS OF FINE ARTS

FORMS OF FINE ARTS 31, 32, 33

Mr. Wright, Chairman; Mr. Eschman, Mr. King. Each 2

In this division, a student may choose two of the three General Education courses. (To be taken in any year, either semester.)

FORMS OF ART 31

Mr. H. King. 2

(Art 205-206, History of Art, 3 hours each semester, or Art 121, Field Trip, may be substituted for this course.)

FORMS OF MUSIC 32

Mr. Eschman. 2

(Music 201-202, History of Music, 3 hours each semester, or Music 205-206, Appreciation of Music, 2 hours each semester, may be substituted for this course.)

FORMS OF THEATRE ARTS 33

Mr. Wright. 2

(Theatre Arts 111-112, Introduction to the Theatre, 2 hours each semester, may be substituted for this course.)

FORMS OF THINKING

MATHEMATICS 40a

Mr. Grudin, Chairman (1960-63); Staff. 4

An introductory course in which basic concepts of mathematics are introduced and applied. Precise definitions, logical reasoning, and the generalization of known concepts are stressed. Two years of high school mathematics are required, but no detailed knowledge is assumed. A student who excels in mathematics and one who plans to major in this subject, or in a related field should substitute for this course the four-credit course, Mathematics 121 or the five-credit course, Mathematics 211. (To be taken in the freshman or sophomore year, either semester.)

LOGIC 40b

Mr. Hepp, Chairman (1960-63); Mr. Bayley. 4

The principles and problems of clear accurate thought, including analysis of meaning, logical structure, and factual inquiry in everyday life and the sciences. (To be taken in the freshman or sophomore year, either semester.)

PRINCIPLES OF SCIENCE

To complete this requirement a student may take Life Science 51-52 and Physical Science 53-54 (minimum total 12 hours). If the student prefers, he may substitute an introductory laboratory science course for one of the two General Education courses in science. *Science majors may elect substitutes for both Life Science and Physical Science.*

A student who has had both Physics and Chemistry in secondary school shall not take Physical Science 53-54 but shall enroll for an introductory physical science course. With it he may elect either Life Science 51-52 or a departmental course in that area that may include Psychology with laboratory.

LIFE SCIENCE 51-52 (General Biology)

Mr. Norris, Chairman (1960-63); Staff. 3

A General Education course which aims at developing through the application of the scientific method to the various problems and demonstrations presented, a working understanding of the important principles and ideas of biology. Devoted principally to the human organism, the course is concerned with the physiology, behavior, reproduction, and embryology of the vertebrate animal. Time is also given to a study of the world of life, both plant and animal, from the hereditary, evolutionary, and ecological points of view with special emphasis on human origins and man's interdependence in the world of life. (To be taken preferably in the freshman or sophomore year.)

For this course, a student who is taking General Education 53-54 may substitute a year course, including laboratory, in psychology.

PHYSICAL SCIENCE 53-54

Mr. Collins, Chairman (1958-61). 3

A General Education course presenting the fundamental principles of physics, astronomy, geology, and chemistry. Demonstrations and laboratory experiments help the student develop a firsthand appreciation of physical science and give him some experience in the scientific method. Three lectures and one laboratory session each week.

For this course, a student who is taking General Education 51-52 may substitute a year course, including laboratory, in astronomy, chemistry, geology, or physics. This alternate is obligatory if the student has had both physics and chemistry in secondary school.

LANGUAGE AND LITERATURE

FOREIGN LANGUAGE

6-8

A student who enters with two years of secondary school credit in a foreign language may satisfy this requirement by taking a 6-credit, second-year course (211-212) and passing the course examination. The student who is beginning a new language will be required to take the 8-hour introductory course (111-112) and is advised to elect the second-year course in order to establish proficiency.

This requirement may be satisfied by proficiency tests which are regularly given at the opening of college each autumn and at the end of each semester. The degree of proficiency necessary may ordinarily be acquired by studying a language three or four years in secondary school or two years in college. A student with language training is encouraged to take a test for proficiency. Reasonable proficiency means, in the case of modern foreign languages, certain abilities, no matter how or when acquired: the ability to get the sense of what an educated native says when he is speaking simply on a general subject, the ability to use the common expressions needed for getting around in the foreign country, speaking with a pronunciation readily understandable to a native, and the ability to grasp directly the meaning of simple, non-technical writing and to communicate its essence orally or in writing. A student who presents for admission four years of Latin or Greek may request a special proficiency examination in classical languages.

LITERATURE (in English or a Foreign Language)

6

Literature in English. A student who elects to meet this requirement may take any literature courses for which he is eligible. He may not, however, count toward this requirement any of the writing courses or English 251 or 346; and if he meets only the minimum requirement he may not take more than three credits in modern literature: English 221, 330, 342, 348, 350.

Literature in a Foreign Language. A student may satisfy the literature requirement by taking a literature course in a foreign language at or above the third-year level.

BASIC PRINCIPLES OF SOCIAL SCIENCE**SOCIAL SCIENCE 71-72****Mr. Cory, Chairman (1959-62); Staff. 3**

A study of man in society, using principles developed by anthropologists, sociologists, economists, political scientists, and diplomatic analysts. Emphasis on understanding American society in a world perspective. Prerequisite: History of Western Civilization 21-22, and either General Education 40a or 40b. General Education 71 is prerequisite to General Education 72. (To be taken in the sophomore or junior year.)

For this General Education course, a student may substitute the first semester of the introductory course in Economics, and the introductory courses in Government, and Sociology. A student interested in any of these fields as a possible major is advised to make this substitution. A student who earns credit in General Education 71-72 and decides to major in Economics, Government, or Sociology, may on recommendation of the instructor get credit for Sociology 207, Government 211, and Economics 211, but *not* for Economics 212.

BASIC PHILOSOPHIC AND RELIGIOUS IDEAS**INTRODUCTION TO PHILOSOPHY AND RELIGION 18****Mr. Scott, Chairman (1959-62); Staff. 3**

A study of great events and ideas in the religion and philosophy of men in the Western World. Emphasis is placed on certain basic issues which the student will meet in other fields of study, and to which he will return in the advanced companion course in this field. (To be taken in the freshman year either semester.)

BASIC PHILOSOPHIC AND RELIGIOUS IDEAS 81 Mr. Scott, Chairman; Staff. 3

An examination of various interpretations of life with emphasis on the integrative function each may perform for one's knowledge and experience. The course strives to further the student's formulation of an adequate philosophy of life. (To be taken in the junior or senior year either semester.)

For this General Education course, a student may substitute one 3-credit course in Philosophy and one 3-credit course in Religion. Normally these would be Philosophy 303 and Religion 303, but any other combination which meets the student's needs and interests is acceptable.

SUMMARY OF COURSE REQUIREMENTS IN GENERAL EDUCATION

Required for Bachelor of Arts and Bachelor of Science Degrees

	Credit-Hours
11-12 Introduction to Composition and Literature	6*
21-22 History of Western Civilization	8*
18 Introduction to Philosophy and Religion	3*
51-52 Life Science (General Biology) and } 53-54 Physical Science or } Other Science (Introductory Course) }	12†
Foreign Language	6 or 8
Literature in English or a foreign language at third year level...	6
71-72 Social Science	6
10s Public Speaking or } 10t Dramatic Interpretation }	2
Forms of Fine Arts (choice of two): } 31 Art; 32 Music; 33 Theatre Arts }	4
40a Mathematics or } 40b Logic }	4
81 Basic Philosophic and Religious Ideas	3
Total	60-62

COURSE REQUIREMENTS IN GENERAL EDUCATION

For Bachelor of Fine Arts

See Art and Theatre Arts under Departmental Courses

For Bachelor of Music

See Degrees in Music under Plan of Study

*This course may not be waived. Any others above, not to exceed eight hours, may be waived upon written permission of the student's major Adviser.

†Both 51-52 and 53-54 are required unless either 51-52 or 53-54 and any introductory course in another science area are substituted. However, any science major, including premedical students, may substitute two introductory science courses for 53-54.

DEPARTMENTAL COURSES

The courses listed under each department indicate the areas of specialization open to a student. Departments of instruction are presented in alphabetical order.

COURSE NUMBERS. Courses offered are listed with the descriptive title and semester-hours of credit. Courses numbered 100-199 are intended primarily for freshmen; 200-299, for sophomores; 300-399, for juniors; and 400-499, for seniors. Odd-numbered courses are given in the first semester and the even-numbered ones in the second semester unless otherwise indicated. Hyphenated courses are year-courses; credit indicates amount to be earned *each semester*.

COURSES OFFERED. The University plans to offer the courses listed below but reserves the right in any year to withdraw those of interest to only a few students.

KINDS OF MAJORS. Three kinds of majors are offered: (1) departmental, (2) transdepartmental, and (3) combined. Requirements for a major in a single department are stated under each department. A major involving a study of subjects relating to more than one department is listed below as a transdepartmental major. A combined major differs from a departmental major in that the field of concentration involves courses from more than one department and in several closely related fields. Arrangements for a combined major may be made with the Dean of the College. Transdepartmental majors described below require the study of related subjects in several departments.

TRANSDepartmental MAJORS

MAJOR IN THE AREA STUDIES: THE AMERICAS, FRANCE, or GERMANY

A major in The Americas, France, or Germany coordinates courses dealing with foreign countries, regions, and civilizations in various departments of the university. The courses are chosen from Modern Languages, Geography, History, Government, Economics, Philosophy, Sociology, and English. This major provides background for a career in foreign service, business enterprises dealing with foreign countries, teaching, journalism, international relations work, or related activities. A student interested in enrolling for The Americas should see Mr. Bancroft; for France, Mr. Secor; and for Germany, Mr. Hirshler.

INDEPENDENT STUDY

401-402. AREA STUDY: SENIOR PROBLEMS IN AREA STUDY

Modern Language Staff. 3

A terminal integrating course of independent study to be taken in the senior year by the student majoring in The Americas, or France, or Germany transdepartmental area sequence.

MAJOR IN SOCIAL STUDIES. The major in Social Studies is designed to give the student a broad cultural background in the various subject areas of the social sciences. A student selecting this major would satisfactorily complete 50 to 60 hours in the departments of Economics, Geography, Government, History, Philosophy, Psychology, Religion, and Sociology. He chooses one of these departments for his major emphasis, thus taking 15 to 18 hours' credit under the guidance of a faculty member from that department who serves as his Adviser in planning a program of related courses from four of the above departments in the social studies areas that will most fully meet his individual needs.

AIR SCIENCE

Col. Allyn, Maj. Glover, Capt. Matthews, Capt. Smith
Chairman, Col. Allyn
Officer-in-charge, Maj. Glover

Satisfactory completion of outlined courses and other Air Force requirements will make the student eligible for a commission in the United States Air Force Reserve. (See Air Force ROTC Program.)

Basic courses (101-102; 201-202) are open to all physically qualified male students. Advanced courses (301-302; 401-402) are open to physically qualified male students who are accepted by the Professor of Air Science (PAS). All interested students should confer with a member of the department prior to registration. (See Courses in General Education for other requirements.)

NOTE: The course of study is divided into the basic course covering the first two years and the advanced course covering the junior year, summer camp, and senior year, in that order. The course consists of blocks of instruction totaling 420 hours, allocated as follows: Freshman and Sophomore years, 60 hours each; Junior and Senior years, 150 hours each; and Summer Camp, an additional 196 hours.

101-102. BASIC AIR SCIENCE**Staff. 1**

Military instrument of national security, elements and potentials of air power, evolution of aerial warfare, air vehicles and principles of flight, and leadership laboratory consisting of basic military training.

201-202. BASIC AIR SCIENCE**Staff. 1**

Evolution of aerial warfare (only in 1960-61), elements of aerial warfare, employment of air forces, space operations, and leadership laboratory consisting of drill and cadet noncommissioned officers' training. Prerequisite: 101-102 or equivalent.

301-302. ADVANCED AIR SCIENCE**Staff. 3**

The Air Force Commander and his staff, problem-solving techniques, communicating in the Air Force, instructing in the Air Force, military justice system, leadership and management, preparation for summer training, and Air Force base functions. Leadership laboratory consisting of cadet commissioned officers' training. Prerequisite: Basic course or equivalent and approval of the Professor of Air Science.

401-402. ADVANCED AIR SCIENCE**Staff. 3**

Weather and navigation, career guidance, military aspects of world political geography, international tensions, and briefing for commissioned service. Leadership laboratory consisting of commissioned cadet officers' training and exercise of command. Prerequisite: 301-302 or equivalent and approval of the Professor of Air Science. (Credit in Geography 261 may be applied toward the second semester of this course.)

ART

Mr. H. King, Mr. Ketner, Mrs. Campbell,

Mr. T. J. Smith (part-time)

Chairman (1960-63), Mr. Ketner

The courses are arranged in sequences to meet the needs of students interested in the practice of art and those who wish to specialize in the history and theory of art.

MAJOR IN ART

An Art major working toward either the Bachelor of Fine Arts or the Bachelor of Arts degree who expects to begin preparation for the professional fields of design, painting, sculpture, ceramics, archi-

lecture, teaching, and museum work should begin with the elementary courses 101-102, 111-112, and 113-114, then confer with the staff for a proper sequence of courses in advanced study.

The candidate for the Bachelor of Fine Arts degree in Art will, in four years, choose a minimum of 44 semester-hours to a maximum of 50 semester-hours from the course offerings of the Department of Art. The selection and sequence of courses will be arranged with the individual candidate according to his particular needs and talents.

In the freshman year the Bachelor of Fine Arts candidate should carry General Education 11-12, 18, 21-22, the second year of the foreign language taken in high school or French 111-112, in addition to Art 101-102, 111-112, and 113-114.

Requirements for all Art majors include the elementary courses in drawing and design, and art theory, art history, and one of the courses in painting.

General Education 31-32-33 serve as an introduction to art appreciation but do not count toward an art major.

NOTE: The Department of Art reserves the right to retain, exhibit, and reproduce for University publications the work submitted by students in any course for academic credit.

HISTORY AND THEORY OF ART

101-102. INTRODUCTION TO THE VISUAL ARTS

Mr. Ketner 1

General course in art structure, terminology, and criticism designed to integrate the several courses and to acquaint the students with professional opportunities. (To be taken with 111-112 and 113-114.)

106. ART CRITICISM

Mr. Ketner. 2

Methods of art criticism and analysis of articles on criticism, followed by practical problems of writing criticisms of selected art forms.

121. FIELD TRIP

Staff. 2

Spring vacation field trip to metropolitan museums, galleries, and other art centers, and interviews with leading artists; preceded by studies of collections and followed by written reports. (May be substituted for General Education 31.)

205-206. HISTORY OF ART

Mr. King. 3

General survey of the Arts of the Western World. Ancient and Medieval (first semester); Renaissance and Modern (second semester). Open to election separately.

307-308. ORIENTAL ART

2

A comprehensive study of the arts of India, China, and Japan approached through the religions and cultures of the Orient. (Offered in 1961-62 and in alternate years.)

407. MODERN ART

Staff. 3

19th century arts through Impressionism, and contemporary movements in architecture, sculpture, painting, and the crafts.

425-426. ART IN AMERICA

2

Colonial art to post-Civil War period (first semester); late 19th century to contemporary arts (second semester) with emphasis upon America's contribution to world art today.

PRACTICE OF ART**103-104. ELEMENTS OF ART**

Mrs. Campbell. 2

Studio course for those wishing some practice in art but not choosing to major. Work includes both basic design problems and drawing in various media.

111-112. DRAWING

Mrs. Campbell. 2

Drawing from still life, figure, and landscape with problems in composition and perspective. To be taken with 101-102 and 113-114.

113-114. DESIGN

Mrs. Campbell. 2

Line, plane, and volume problems in black and white, color and 3-dimensional materials. To be taken with 101-102 and 111-112.

211-212. LIFE DRAWING

2

Study from the human figure in charcoal and other media with emphasis on structure in line, value, and color.

213-214. INTERMEDIATE DESIGN

2-3

215-216. PAINTING

Mr. Ketner. 3

Problems in watercolor or oil painting and other media from still life, the human figure, landscape, and non-figurative approaches to pictorial organization. Prerequisites: 112 and 114.

221-222. CERAMICS

Staff. 3

Basic techniques of building ceramic forms by hand and by wheel as well as by glaze formula, decorative techniques, and the firing processes.

231-232. GRAPHICS

Mrs. Campbell. 2

A study of the several media of printmaking including woodcut, linoleum, and etching in black and white and in color.

241-242. SCULPTURE

3

Experiments in three dimensional design in various media including modeling in clay, casting in plaster, and direct work in wood.

313-314. ADVANCED DESIGN

2-3

315-316. INTERMEDIATE PAINTING

Mr. Ketner. 3

Prerequisite: 216.

361-362. DIRECTED STUDY IN ART

Staff. 3

For students of marked creative ability who wish to pursue advanced subjects not otherwise listed, such as design, drawing, graphics, ceramics, or history, and criticism.

415-416. ADVANCED PAINTING

Mr. Ketner. 3

Prerequisite: 316.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF PUBLIC SCHOOL ART (See Education 341.)

ASTRONOMY

Chairman (1960-63). Mr. Wheeler

Astronomy 111 and 112 are intended primarily for those who desire an elementary acquaintance with the physical universe. Those who wish a 4-hour course with laboratory may elect 113 and 114 in combination with 111 and 112.

MAJOR IN ASTRONOMY

Requirements for a major in Astronomy are 111, 112, 113, 114, 211-212; Mathematics through Calculus; Physics 121-122 and 211-212; with 12 additional hours of Astronomy and Physics in 300 or 400 courses.

111. DESCRIPTIVE ASTRONOMY

Staff. 3

Celestial sphere: coordinate systems and constellation study; the solar system—motions of the earth and moon; latitude, longitude, and time; planets, comets, and meteors. Astronomy 113 is recommended as an accompanying course. *No previous training in Physics or College Mathematics is required.*

112. **DESCRIPTIVE ASTRONOMY** Staff. 3
The Galactic System—the sun as a star; distances, motions, luminosities, types and classes of stars, and their spectra; extragalactic systems. Prerequisite: 111 or consent of instructor.
113. **LABORATORY ASTRONOMY** Staff. 1
Devoted principally to problems intended to clarify the lecture material of Astronomy 111. May be taken only in combination with 111. (Evening to be arranged.)
114. **LABORATORY ASTRONOMY** Staff. 1
Continuation of 113, paralleling 112. (Evening to be arranged.)
- 211-212. **GENERAL ASTRONOMY** Mr. Wheeler. 3
A secondary comprehensive course for majors in Astronomy and related sciences. Prerequisite: 111, 112, or consent of instructor.
215. **STELLAR ASTRONOMY** 3
Prerequisite: 111, 112, and consent of instructor.
218. **THEORY AND PRACTICE OF OBSERVATION** Arr.
Prerequisite: 113, 114, and consent of instructor.
- 361-362. **DIRECTED STUDY** Staff. 3
411. **CELESTIAL MECHANICS** 3
Prerequisite: The Calculus.
414. **ASTROPHYSICS** 3
- 461-462. **INDIVIDUAL WORK FOR HONORS** Staff. 3

BIOLOGICAL SCIENCES

Mr. Morgan, Mr. Truman, Mr. Archibald, Mr. Norris, Mr. Alrutz
Chairman (1960-63), Mr. Archibald

The biology curriculum includes prerequisite courses for professional training in medicine, dentistry, medical technology, nursing, and forestry. It supplies training for the teacher and the laboratory technician and provides a well-rounded basic preparation for graduate study and investigation in various areas of the field, as well as contributing to general cultural background. Although General Education 51-52, Life Science (General Biology), meets the minimum entrance requirement of medical schools, recommended or required by some are Biology 211, 212, and 224. Medical schools require a medical admission test in the student's final undergraduate year. The testing fee of \$10 is payable to the testing organization.

MAJOR IN BIOLOGY

A student majoring in Biology will elect a minimum of 26 hours in Biology, including General Education 51-52, Life Science (General Biology), and 401-402. One year of college chemistry is required. The sequence is arranged in consultation with the staff members with whom the student chooses to do his advanced work, or with the chairman of the department. General Education 40a or an equivalent course in Mathematics is recommended in preference to 40b (Logic).

LIFE SCIENCE (General Education 51-52—General Biology) or its equivalent, unless waived by proficiency or advanced placement examination becomes the prerequisite for advanced work in the department and is credited toward the major. (For description of the course see 51-52 under Courses of Study—Principles of Science.)

120. LOCAL FLORA

Mr. Truman. 3

A taxonomic study of the local flora, including the spring flowering species, the common trees in winter and summer conditions, and also the position of the flora in the plant geography of the United States.

151. GENERAL ZOOLOGY

Staff. 4

A one-semester advanced level study of life's processes as exemplified in the invertebrate and lower vertebrate animals. This course is designed for the student who has completed two years of high school biology or who has achieved advanced standing by proficiency examination. It is also open to the student who has completed General Education 51-52.

152. GENERAL BOTANY

Mr. Truman. 4

An advanced level experimental and developmental study of fundamental biological principles as expressed in the structure, activities, and evolution of plants, including identification of common trees and spring flowers in this area. Prerequisite: Advanced standing achieved by proficiency examination, or General Education 51-52, or its equivalent.

201-202. ANATOMY AND PHYSIOLOGY

Mr. Morgan. 3

The normal structure and functions of the human body. Two lecture periods and one two-hour laboratory a week. 201 is a prerequisite for 202.

211. COMPARATIVE ANATOMY

Mr. Morgan. 4

A study of the phylum Chordata based chiefly on anatomical relations with brief consideration of classification and habits. Labor-

atory work is chiefly detailed dissection and comparative study of the primitive chordates, the shark, *Necturus*, and the rat. Prerequisite: General Education 51-52.

212. MAMMALIAN ANATOMY

Mr. Morgan. 4

Anatomy of mammals based on the cat, with human material for comparison. This course usually follows 211 but may be taken separately. Prerequisite: General Education 51-52.

213. FIELD ZOOLOGY

Mr. Alrutz. 3

The biology and identification of local organisms, emphasizing techniques of collection, preservation, preparation, and identification. Prerequisite: General Education 51-52 or consent of instructor. (Offered first semester 1960-61 and in alternate years.)

214. ECOLOGY

Mr. Alrutz. 3

An introduction to the fundamentals of Ecology. Class work is supported by frequent field trips and individual projects. Prerequisite: General Education 51-52 or consent of instructor. (Offered second semester 1960-61 and in alternate years.)

215. GENERAL BACTERIOLOGY

Mr. Truman. 5

Introduction to the bacteria and the importance of their activities in nature, industry, and disease, with laboratory emphasis on staining, culture, and physiological characteristics. Prerequisites: General Education 51-52 and one year of chemistry. Open also to chemistry majors.

218. PLANT MORPHOLOGY

Mr. Truman. 4

Comparative study of the structure and life cycles of the major plant groups with reference to their evolutionary relationships. Prerequisite: 152. (Offered on demand.)

222. PARASITOLOGY

Mr. Alrutz. 3

A study of the common parasites of animals with special emphasis on those affecting man. Prerequisite: General Education 51-52, or consent of instructor. (Offered in second semester 1960-61 and in alternate years.)

223. HISTOLOGY

Mr. Norris. 4

The minute anatomy of vertebrates, chiefly mammals, including the making of microscopic preparations. Prerequisite: General Education 51-52.

224. EMBRYOLOGY

Mr. Archibald. 4

The development of the vertebrate body, based on the study of the frog, chick, and pig. Usually follows 223 but may be taken separately. Prerequisite: General Education 51-52.

225. GENETICS

Mr. Archibald. 2

A basic course in the principles of heredity, their importance in human life and their bearing on evolution. Prerequisite: General Education 51-52 or consent of instructor. (Offered first semester 1960-61 with 226 as a 4-hour course.)

226. EVOLUTION

Mr. Archibald. 2

The relations of living things, including the origin of life and existing species and theories of organic evolution. Prerequisite: General Education 51-52 or consent of instructor. (Offered first semester 1960-61 with 225 as a 4-hour course.)

227. ENTOMOLOGY

Mr. Alritz. 3

Introductory study of insects, utilizing field and laboratory experiences. Prerequisite: General Education 51-52 or consent of instructor. (Offered first semester 1961-62 and in alternate years.)

232. PLANT PHYSIOLOGY

Mr. Truman. 4

A lecture, laboratory, and greenhouse study of the functional relationships of the plant body in which absorption and transfer of materials, photosynthesis, respiration, and transpiration are treated with special attention to the problems of plant growth, development, and propagation. Prerequisite: 152 and one year of chemistry. (Offered second semester 1960-61 and in alternate years.)

234. GENERAL PHYSIOLOGY

Mr. Norris. 3

A study of function with emphasis upon the chemical nature and action of subcellular structures within the cell. Prerequisites: General Education 51-52 and one year of chemistry.

361-362. DIRECTED STUDY

Staff. 3

Opportunities for the qualified student to extend his interest beyond the limits of course offerings.

401-402. SEMINAR

Staff. 1

A consideration of the history of biology and contemporary research. Required of all majors.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF SCIENCE (See Education 311.)

CHEMISTRY

Mr. Ronneberg, Mr. Everhart (part-time), Mr. Spessard, Mr. Collins,
Mr. John B. Brown, Mr. Bettinger, Mr. Hoffman
Chairman (1958-61), Mr. Spessard

Courses in Chemistry provide a general cultural background, preparation for entering chemical industry or for graduate study in pure chemistry or chemical engineering; and basic preparation for professional work in certain scientific fields of medicine, dentistry, physics, and engineering, and as laboratory technicians.

A deposit each semester for breakage and nonreturnable supplies is required except for 350 and 450.

MAJOR IN CHEMISTRY

The department is among those accredited by the American Chemical Society with respect to facilities, faculty, and curricula.

The major for a student desiring a Bachelor of Science degree with certification to the American Chemical Society consist of courses 111-112, 211-212, 311-312, 323-324, 323b-324b, 350-450, and at least two of the following courses: 317, 361-362 or 461-462, 415 419. Additional requirements are Mathematics 211-212 or 221-222, Physics 115-116 or 121-122, and a reading knowledge of German.

The minimum requirements for a pre-medical student majoring in chemistry who wishes to graduate with a Bachelor of Arts degree (without certification to the American Chemical Society) are courses 111-112, 211-212, 323-324, 323b-324b, 350-450; Physics 115-116; and Mathematics 121-122.

Courses 111-112 and 323-324 meet the entrance requirements of medical schools as a minimum while 211-212 is considered highly desirable and is required or highly recommended by many medical schools.

101-102. THE SCIENCE OF CHEMISTRY

Mr. Collins. 4

An introductory course in general chemistry including fundamentals of chemistry and applications to everyday living. A considerable portion of the second semester's work deals with elementary principles of organic chemistry. This course is not a prerequisite to advanced chemistry courses, although a student may, by consent of the instructor after completing 101, transfer to 112.

111-112. GENERAL CHEMISTRY INCLUDING QUALITATIVE ANALYSIS

Staff. 4

The fundamental principles of chemistry including qualitative analysis. It is recommended that a student have completed a high school course in Physics or Chemistry as a preparation for this course. Prerequisites: High school algebra and geometry. (Three class periods and one laboratory period a week.)

211-212. ELEMENTARY PHYSICAL CHEMISTRY—QUANTITATIVE ANALYSIS

Mr. Hoffman. 4

A year-course in which the topics of elementary physical chemistry and quantitative analysis are presented as an integrated program. Laboratory work includes volumetric and gravimetric techniques of analysis and selected physical-chemical measurements. Optical and electrochemical methods are also introduced in the second semester. Prerequisites: 112 and General Education 40a or Mathematics 121. (Two lectures and two laboratory periods a week.)

311-312. THEORETICAL CHEMISTRY

Staff. 4

Full and mathematical treatment of fundamental theories underlying the science of chemistry. Prerequisite: 212; Physics 116 or 122; and Mathematics 215-216 or 221-222. Physics majors accepted on recommendation of their adviser. (Three lectures and one laboratory period a week.)

317. INORGANIC CHEMISTRY

Mr. Bettinger. 3

A systematic study of descriptive, inorganic chemistry, periodic relationships, and theories. Laboratory includes inorganic preparations and techniques. Prerequisite: 212, and 312 or 324 (may be taken concurrently) or with consent of instructor. (Two lectures and one laboratory period a week.)

323-324. ORGANIC CHEMISTRY

Mr. Spessard. 4

The chemistry of aliphatic, aromatic, and heterocyclic compounds of carbon. (Three lectures and one laboratory period a week.) Prerequisite: Junior standing, 112, 212, or consent of instructor.

323b-324b. ORGANIC CHEMISTRY LABORATORY

Mr. Spessard. 1

Required of all chemistry majors; to be taken concurrently with 323-324. (One laboratory period a week.)

350-450. READING COURSE AND SEMINAR

Staff. 1

Designed to familiarize the student with the chemical literature and to integrate the student's work in the various areas of chemistry. Meets one session per week during the second semester of the junior year and the first semester of the senior year.

361-362. DIRECTED STUDY IN CHEMISTRY

Staff. 3

Offered to juniors and seniors. Prerequisite: 212, 312 or 324, or consent of instructor.

415. QUALITATIVE ORGANIC ANALYSIS

Mr. Spessard. 3

Methods of qualitative organic analysis. Prerequisite: 324. (One lecture and two laboratory periods a week.)

419. INSTRUMENTAL ANALYSIS

Staff. 3 or 4

The theory and practice of instrumental analysis to include spectrophotometry, pH measurements, electrodeposition, and polarography. Some advanced topics in physical and inorganic chemistry are also included for the fourth credit hour. Prerequisite: Chemistry 311 and registration or credit in Chemistry 312. (One or two lectures and two laboratory periods a week.)

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF SCIENCE (See Education 311.)

CLASSICAL LANGUAGES

Chairman, Mr. L. R. Dean (part-time)

Students who desire to major in Classical Languages should consult with the Chairman during the freshman year. A major sequence can be arranged in either Latin or Greek.

COURSES IN CLASSICAL CIVILIZATION

(These courses do not require use or study of Greek or Latin Languages.)

GREEK 101. GREEK CIVILIZATION

2

Topical study of the chief aspects of ancient Greek life and thought. May be included in a History major. (Not offered in 1960-61.)

LATIN 104. ROMAN CIVILIZATION

2

Structure of Roman customs and institutions as a legacy to the modern world. (Not offered in 1960-61.)

GREEK 201. GREEK DRAMA

2

Fifteen plays, tragedies, and comedies are read and discussed. Alternates with 203. (Not offered in 1960-61.)

GREEK 203. GREEK LITERATURE IN ENGLISH 2

Cross-section of the varied forms of literary expression, exclusive of drama. Alternates with 201. (Offered in 1960-61.)

GREEK 204. MYTHOLOGY-RELIGION 2

A survey of the principal myths and a study of their use in European and American Literature and Art. (Offered in 1960-61.)

LATIN 206. LATIN LITERATURE IN ENGLISH 2

Selections from the leading writers. Alternates with Greek 204. (Not offered in 1960-61.)

COURSES IN LANGUAGE

(Any of the following will be given, if demand warrants.)

GREEK**111-112. INTRODUCTION TO THE GREEK LANGUAGE 3**

Forms, grammar, and elementary reading. Open to the students of all classes.

211-212. GREEK NEW TESTAMENT 3

One of the Gospels (first semester); one of Paul's Epistles (second semester). Prerequisite: 111-112.

LATIN**101. SELECTIONS FROM CICERO 3**

Prerequisite: Two or three years of high school Latin. (Offered in 1960-61.)

102. VIRGIL 3

Selections from the first six books of the *Aeneid*. Prerequisite: Three years of high school Latin. (Offered in 1960-61.)

111-112. SELECTIONS FROM LATIN LITERATURE 3

Principally comedies, lyric, elegiac, and satiric poetry. Prerequisite: Four years of high school Latin.

211. CICERO AND OVID 3

History and mythology. Sight reading. Prerequisite: 111-112.

212. PLINY AND ROMAN HISTORIANS 3

Letters and essays. Prerequisite: 211.

311-312. VIRGIL 3

A study of all the poems of Virgil.

THE TEACHING OF LATIN (See Education 333.)

ECONOMICS

Mr. Gordon, Mr. L. C. Lehman, Mr. Chiang,
Mr. J. D. Lehman, Mr. DeForest, Mr. W. L. Henderson
Chairman (1960-61), Mr. L. C. Lehman
Chairman (1961-64), Mr. Chiang

A student wishing to concentrate in Economics may choose between a major in Economics and a major in Business.

MAJOR IN ECONOMICS

A student majoring in Economics is required to take 211-212. He may take additional courses in this department up to a maximum of 36 hours (not counting 211) and should take at least 30 hours.

He is required to take the following related courses: General Education 40a, History 222, and two of the following: General Education 40b, Mathematics 108, or 205.

In addition, a major in Economics is required to take at least 12 hours among the following related courses: Geography 226; Government 211, 212, 345; History 321; Mathematics 206; Philosophy 321, 326; Psychology 211, 320, 417; Sociology 207, 208, 415. *A student who contemplates graduate study in economics should elect a modern foreign language and take Mathematics 121-122.*

MAJOR IN BUSINESS

A major in Business is required to take 211-212. He may take additional courses in this department up to a maximum of 36 hours (not counting 211) and should take at least 30 hours.

He is required to take the following related courses: General Education 40a, History 222, and two of the following: General Education 40b, Mathematics 108, or 205.

In addition, a business major is required to take at least 12 hours among the following related courses: Geography 226; Government 211, 213, 231-232; Mathematics 206; Philosophy 321, 326; Psychology 211, 320, 417; Sociology 207, 415. *A student contemplating graduate study in business should take Mathematics 205-206.*

211-212. PRINCIPLES AND PROBLEMS OF ECONOMICS

Staff. 3

This course, primarily designed for social science majors, is oriented to present an explanation of how the private enterprise system operates, and to provide fundamental economic principles, and working tools prerequisite for economic analysis.

223-224. ACCOUNTING SURVEY

Mr. J. D. Lehman. 3

A survey of accounting designed specifically for liberal arts students interested in business, economics, law, and government. Introduction to the principles of financial statements, costs and revenues, cost accounting, consolidated statements, and analysis of financial statements.

312. COMPARATIVE ECONOMIC SYSTEM

Mr. J. D. Lehman. 3

A study of alternate economic systems as conceived by theoreticians and a comparative study of economic systems as they exist in reality. The course emphasizes the development and current performance of the economic systems of the United States, England, and the Soviet Union.

313. PUBLIC POLICIES TOWARD BUSINESS

Mr. Henderson. 3

The development of public policy in the United States from its common law origins—Federal anti-trust legislation and its judicial interpretation. Public regulation of utilities, transportation, and communications. A study of the modern industrial structure and organization. Prerequisite: 211-212 or consent of instructor.

314. MARKETING, PUBLIC POLICY, AND PRICES

3

An analysis of the functions and agencies involved in marketing, and of the structure of markets. Relevant anti-trust material will be included. A theoretical study of the effects of distribution on prices.

315. MONEY AND BANKING

Mr. L. C. Lehman. 3

Principles of money, credit, and banking, including a study of the institutions and financial organizations designed to supply society with adequate media of exchange. Development of American monetary and banking practices and policies. Prerequisites: 211-212, or consent of instructor.

316. CORPORATE ORGANIZATION AND FINANCE

Mr. J. D. Lehman. 3

Principles underlying the promotion, organization, financial structure, control, failure, and reorganization of corporate enterprise. Prerequisites: 211-212, or consent of instructor. It is highly desirable that students registering for this course shall also have had 223-224.

317-318. LABOR ECONOMICS

Mr. Gordon. 2

Employer-employee relations as they affect individuals and the national economy. The functions of various branches of government in the cross currents of employer, employee, and consumer interests. *Both semesters must be completed for credit.* Prerequisites: 211-212, or consent of instructor.

321. RESOURCE ALLOCATION AND INCOME DISTRIBUTION

Mr. DeForest. 2-3

Current issues and policies relating to the allocation of resources, natural and human, and the distribution of income are studied from the standpoint of economic thought and theory. The writings of a sample of leading economists from the 18th century to date will be considered.

332. ECONOMICS FOR CONSUMERS

Mr. Gordon. 3

An analysis and evaluation of consumers' role in the economy, followed by consideration of forces affecting consumer demand such as custom, fashion, and advertising, concluding with a study of ways in which consumers can perform their functions more effectively.

342. SEMINAR IN CURRENT ECONOMIC PROBLEMS

Mr. Gordon. 1

A seminar dealing with economic problems in the news. Reading, analysis, and interpretation of news dispatches in leading newspapers. Prerequisites: Junior standing and consent of instructor.

361-362. DIRECTED STUDY IN ECONOMICS

Staff. 3

410. PUBLIC FINANCE

Mr. L. C. Lehman. 3

Public revenues, expenditures, debt, and financial administration, with special attention to the theory and practice of taxation and to problems of fiscal policy. Prerequisites: 211-212, or consent of instructor.

413. RECENT DEVELOPMENTS IN ECONOMIC THOUGHT

Mr. Gordon. 2

Based on readings in current economic journals. Consent of instructor.

414. SENIOR RESEARCH SEMINAR

Mr. Gordon. 2

Introduction to principles and methods of research. Consent of instructor.

419. PRINCIPLES OF INSURANCE

Mr. Gordon. 3

Survey of property, casualty, liability, and social insurance, with special emphasis on the principles of life insurance. Open to all seniors.

421-422. ADVANCED ECONOMIC ANALYSIS

Mr. Chiang. 2

Application of the tools of economic analysis to problems of production, pricing, distribution, income, and employment. Prerequisites: 211-212.

424. PRINCIPLES AND PRACTICES OF INVESTMENTS Mr. L. C. Lehman. 3

The social implications of investments; the problem of investing funds from the individual viewpoint; analysis of types of securities; methods of analyzing specific securities; evaluation of forecasting methods. Prerequisites: 211-212, or consent of instructor. (It is highly desirable that students registering for this course shall also have had 223-224.)

425. FLUCTUATIONS IN THE LEVEL OF PRICES, INCOME, AND EMPLOYMENT

Mr. J. D. Lehman. 3

A study of national income accounting, major theories of prosperity and depression, the role of special interest groups in economic fluctuations, and stabilization proposals. Prerequisites: 211-212, 315, or consent of instructor.

431. INTERNATIONAL TRADE AND FINANCE

Mr. Chiang. 3

Bases of trade among nations; the theory and mechanism of international financial transactions; evaluation of international commercial and financial policies, with special reference to those of the United States. Prerequisites: 211-212 or consent of instructor.

440. WASHINGTON FIELD TRIP

Mr. L. C. Lehman. 2

A trip to observe the federal government perform its economic functions. Conferences are arranged with individuals prominent in formulating or administering governmental economic policies. Spring vacation. Consent of instructor.

442, 444. DENISON BUSINESS COUNCIL FIELD TRIP

2

A field trip for the purpose of observing outstanding business and financial organizations in operation. Conferences will be arranged with prominent executives of the various companies. Trips are arranged as student demand warrants; 442 to Columbus and Cleveland; 444 to Columbus, Cincinnati, and Dayton. Spring vacation. Consent of instructor.

452. SEMINAR IN MATHEMATICAL ECONOMICS

Mr. Chiang. 2

Application of differential calculus and other mathematical methods to economic analysis. Consent of instructor.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF SOCIAL STUDIES (See Education 320.)

EDUCATION

Mr. Carter, Mr. Holton
Chairman (1959-62), Mr. Carter

TEACHER PREPARATION. Denison University is accredited by the State Department of Education in Ohio in the teacher-preparation field of secondary education, including the junior high school and senior high school. A *Special Certificate in Music* (See Music Curriculum) may be obtained on completion of the required courses of this curriculum. A student registering for courses in Education may be expected to demonstrate at least mean performance on a nationally standardized achievement test, demonstrate competence in oral and written English, and in handwriting and vocabulary. The student may be required to submit to a speech test given by the Department of Speech and, if found deficient, must register for appropriate courses.

A student expecting to become a teacher or coach of athletics should confer with the members of the Department of Education as early as possible on planning an effective four-year schedule.

A student who takes student-teaching must meet the requirements for teacher certificates in the State of Ohio. A student who plans to meet the certification requirements of other States should confer with the members of the Department of Education as early as possible in order to elect the proper courses.

Student teaching assignments are made in the various schools in Granville, Newark, and Licking County. These assignments are made by the Department of Education but *responsibility for transportation to the school rests with the student.*

MAJOR IN EDUCATION. A student majoring in Education qualifies for a Bachelor of Science in Education degree. He is required to take a minimum of 24 hours in the department, and General Psychology. He must take the following courses: Education 213, 217, 325, 326 or special methods in an academic subject; 415, 416, and 420.

213. THE SECONDARY SCHOOL CURRICULUM

Mr. Carter. 3

A general orientation in the field of the secondary school curriculum to aid the student in the understanding of factors influencing the curriculum and of the environment in which he will teach.

215. HISTORY OF EDUCATION

3

This course will place some emphasis on education in the United States.

217. CHILD AND ADOLESCENT DEVELOPMENT Mr. Carter. 3
Psychological development especially during early periods of growth. (Also listed as Psychology 217.)
311. THE TEACHING OF SCIENCE Mr. Truman. 3
Prerequisite: Education 217. (Offered in 1961-62 and in alternate years.)
315. METHODS OF MUSIC FOR THE ELEMENTARY SCHOOLS Mr. Hunter. 3
Prerequisite: Education 217. Alternates with 316. (Offered in 1960-61 and in alternate years.)
316. METHODS OF TEACHING MUSIC IN THE HIGH SCHOOL Mr. Hunter. 3
Prerequisite: Education 217. Alternates with 315. (Offered in 1960-61 and in alternate years.)
318. EDUCATIONAL SOCIOLOGY Mr. Valdes. 2
Prerequisite: Education 217 or Sociology 207 or its equivalent. (Also listed as Sociology 318.)
320. THE TEACHING OF SOCIAL STUDIES Mr. Valdes. 3
Prerequisite: Education 217.
325. EVALUATION OF TEACHING 3
Construction and use of tests; selection of standard tests; and interpretation of test results.
326. THE TEACHING OF GENERAL METHODS IN HIGH SCHOOL 3
Prerequisite: Education 217.
331. THE TEACHING OF ENGLISH Miss Lewis. 3
Prerequisite: Education 217.
333. THE TEACHING OF LATIN Mr. Dean. 2-3
Prerequisite: Education 217. (Offered only on demand.)
335. THE TEACHING OF MATHEMATICS 3
Prerequisites: Education 217, Mathematics 122. (Offered in 1961-62 and in alternate years.)
339. THE TEACHING OF SPEECH Mr. Crocker. 2
History of rhetorical thought, psychology of language, phonetics, the shaping of speech curriculum. Prerequisite: Education 217.
341. THE TEACHING OF PUBLIC SCHOOL ART 3
Prerequisite: Education 217. (Offered second semester in 1961-62 and in alternate years.)

343. THE TEACHING OF MODERN LANGUAGES Mr. F. L. Preston. 3
Prerequisite: Education 217. (Offered in 1960-61 and in alternate years.)

- 345-346. SPECIAL PROBLEMS Staff. 2 or 3
Independent work on selected topics under the guidance of staff members. Consent of chairman.

352. METHODS AND MATERIALS OF TEACHING PHYSICAL EDUCATION AT THE SECONDARY SCHOOL LEVEL Miss Shepard, Mr. Yard. 4
Prerequisite: Education 217.

354. METHODS IN RECREATIONAL DANCE Miss Van Horn. 2
Prerequisite: Education 217, or consent of the instructor.

415. STUDENT TEACHING IN THE MAJOR FIELD Director, and Staff. 3
Eligibility: Residence at Denison for one year; an average grade of B in his teaching field; a recommendation from the department of the subject(s) in which student expects to teach; *consent of the staff of the Department of Education*; and, acceptance by the school officials at the school in which the student teaching is to take place.

416. STUDENT TEACHING IN A MINOR FIELD
Eligibility: Same as Education 415.

Note: Education 415 and 416 are offered both semesters. The student needs to take both courses, either concurrently or in consecutive semesters. However, a student may not take more than 15 semester-hours *including student teaching* during the first semester he seeks experience in this area. The 15-semester-hour maximum does not apply to the second semester of student teaching. *The student will have a conference each Thursday at 4 p.m., during the first semester he takes student teaching.*

420. THE PHILOSOPHY OF EDUCATION Mr. Macoskey. 3
An inquiry into the philosophical issues associated with education including such problems as The School in Relation to Society and The Aims and Values of Education. The educational philosophies of pragmatism, realism, idealism, and existentialism are critically evaluated. Same as Philosophy 420.

445. METHODS OF TEACHING HEALTH EDUCATION Mr. Yard. 3
Prerequisite: Education 217.

- 461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

ENGINEERING SCIENCE

Mr. Sedeen

A student interested in Engineering should take a Pre-Engineering program, majoring in a basic science such as mathematics, physics, or chemistry, his choice depending upon the branch of engineering he wishes to enter. Pre-Engineering credits earned at Denison are accepted by engineering schools. For further information see Combined Arts-Professional Courses for liberal arts-engineering arrangements. An interested student should consult the Director of Testing and Vocational Services or the Chairman of Mathematics or any of the sciences.

The following courses in Engineering Science may be elected by pre-engineering and other students:

101. STATISTICAL GRAPHS 2

Use of instruments, lettering, and tracing; construction of different types of charts and graphs used in statistical work. Not restricted to engineering students.

111. ENGINEERING DRAFTING Mr. Sedeen. 2

Use of instruments, simple projections, freehand sketching, geometric problems, conventional signs, and tracings. Recommended for non-engineering students, particularly those majoring in the sciences.

112. DESCRIPTIVE GEOMETRY Mr. Sedeen. 2

Conventional projection theories of drafting with problems and applications in point, line, and plane; intersection and development of surfaces. Prerequisite: 111.

115. MACHINE DRAWING Mr. Sedeen. 2

Elementary design and working drawings. Prerequisite: 111.

ENGLISH

Mr. J. L. King, Mr. Downs, Mr. Bennett, Mr. Mahood,
Miss Shannon, Miss Lewis, Mr. Marshall, Mr. M. E. Brown, Mr. Nichol,
Mr. Consolo, Mr. Dickey
Chairman (1960-63), Miss Lewis

MAJOR IN ENGLISH**I. General Requirements**

A student majoring in this department must elect a minimum of 26 hours in English, including 430, and must have two college years or its equivalent of one modern foreign language.

General Education 11-12 *do not count as credit toward a major.*

A student who expects to have English as a teaching field should include in his courses for certification the following: 230, 237, 346, and at least one semester of 211-212.

II. Special Requirements

MAJOR IN LITERATURE: The general requirements above, and 322. Depending upon prior preparation a student may be required to take any of these: 211-212, 230, and 237.

MAJOR IN WRITING: The general requirements above, and 346, and a minimum of 12 semester-hours of composition. This minimum of 12 semester-hours must include either 407-408 or 461-462.

A student who expects to have English as a teaching field should include in his course for certification the following: 230, 237, and at least one semester of 211-212.

211-212. ENGLISH LITERATURE Staff. 3

A study of English Literature from the beginning to the late 18th century (first semester); from the 18th century to the 20th century (second semester).

218. THE BIBLE AS LITERATURE Mr. King. 2

221. MODERN AMERICAN AND BRITISH LITERATURE Staff. 3

A study of American and British literature since 1900.

230. AMERICAN LITERATURE Staff. 3

A study of American Literature focusing primarily on writers of the 19th century.

237. ADVANCED COMPOSITION Staff. 3

Theory and practice in writing expository and narrative prose and lyric poetry.

257. NARRATIVE WRITING 3

(Offered first semester 1961-62.)

267. ESSAY AND ARTICLE WRITING Mr. Bennett. 3

(Offered second semester 1960-61.)

277. POETRY WRITING 3

(Offered second semester 1961-62.)

287. **PLAY WRITING** Mr. Bennett. 3
(Offered first semester 1960-61.)
310. **STUDIES IN LITERATURE** Staff. 3
An intensive study of selected writers or works. May be taken more than once for credit.
- 321-322. **SHAKESPEARE** Mr. King. 3
A study of Shakespeare and his times, the comedies and histories (first semester); the tragedies and later romances (second semester).
323. **MILTON AND THE 17th CENTURY** Miss Lewis. 3
A study of such representative writers as Jonson, Donne, Herrick, Herbert, and Marvell, followed by a careful reading of Milton's *Paradise Lost*. (Offered second semester 1961-62.)
324. **THE ROMANTIC MOVEMENT IN ENGLAND** Miss Shannon. 3
A brief review of the movement in the 18th century, followed by a study of the works of Wordsworth, Coleridge, Byron, Shelley, and Keats. (Offered first semester 1961-62.)
326. **THE SHORT STORY** 3
A study of the short story as a literary form, with analysis of typical examples.
329. **THE ELIZABETHAN DRAMA** 3
A study of the drama in England from 1580 to 1642 (exclusive of Shakespeare), with emphasis upon the works of Marlowe and Jonson. (Offered first semester 1961-62.)
330. **THE MODERN DRAMA** Miss Shannon. 3
A study of drama from Ibsen to the present, with emphasis upon the works of British and American playwrights.
333. **CHAUCE AND SPENSER** Mr. Brown. 3
The study of two poetic visions, the one medieval and realistic, the other Renaissance and idealistic. Readings will include *The Canterbury Tales* and *The Faerie Queene*. (Offered first semester 1960-61.)
335. **VICTORIAN PROSE AND POETRY** Mr. Marshall. 3
A study of Tennyson, Browning, Arnold, and two or three of this group: Clough, Fitzgerald, the Rossettis, Morris, Meredith, Swinburne, Carlyle, and Ruskin. (Offered second semester 1961-62.)
339. **THE AGE OF WIT AND SATIRE** Miss Lewis. 3
The skeptical and critical mind of the Restoration and 18th century as reflected in poetry, comic drama, and prose. Emphasis on Dryden, Swift, and Pope. (Offered second semester 1960-61.)

341. THE ENGLISH NOVEL Mr. Mahood. 2-3
The development of the novel in England during the 18th and 19th centuries. Additional outside reading for three credits.
342. ENGLISH AND AMERICAN NOVEL—1870 TO THE PRESENT Mr. Mahood. 2-3
Additional outside reading for three credits.
- 343-344. READINGS IN EUROPEAN LITERATURE Mr. Downs. 3
A study in comparative literature of selected complete major works in translation from Homer's *Iliad* to Silone and Sartre. (Offered in 1960-61.)
346. THE ENGLISH LANGUAGE Staff. 3
A study of the English language and its development.
348. THE CONTINENTAL NOVEL OF THE 20th CENTURY Mr. Mahood. 2
A seminar dealing primarily with the works of Nobel Prize winners. (Offered second semester 1961-62.)
350. CONTEMPORARY LITERATURE Mr. Downs. 2-3
A seminar in 20th century American, English, and in translation, European Literature. Additional outside reading for three credits.
- 361-362. DIRECTED STUDY IN ENGLISH Staff. 3
373. THE AMERICAN LITERARY RENAISSANCE Mr. Nichol. 3
A seminar dealing with authors to be chosen from Poe, Emerson, Thoreau, Hawthorne, Melville, and Whitman. Additional outside reading for three credits. (Offered first semester 1961-62.)
375. THE BEGINNINGS OF AMERICAN REALISM AND NATURALISM Mr. Nichol. 3
A seminar dealing with authors to be chosen from Howells, Twain, James, Norris, Crane, and Dreiser. Additional outside reading for three credits. (Offered first semester 1960-61.)
- 407-408. SEMINAR IN WRITING Staff. 3
430. PROBLEMS IN LITERATURE AND CRITICISM Staff. 3
The theory of literature, its criticism and scholarship, studied in relation to widely known poems, plays, and novels. Entails independent research in English and at least one foreign language. *Required of all senior English majors.*
- 461-462. INDIVIDUAL WORK FOR HONORS Staff. 3
THE TEACHING OF ENGLISH (See Education 331.)

GEOLOGY AND GEOGRAPHY

Mr. Mahard, Mr. Graham

Chairman (1958-61), Mr. Mahard

MAJOR IN GEOLOGY

A student majoring in Geology is expected to take four years (eight courses) in geology plus Geology 320, 400, and Geography 226. In addition a minimum of 24 semester-hours is required in Mathematics, Chemistry, Physics, Biology, and Engineering Science.

GEOLOGY 111. PHYSICAL GEOLOGY Mr. Mahard, Mr. Graham. 4

Study of the earth's crustal features and the physical processes which build and modify these features. Emphasis placed on the effects of these phenomena upon man's activities. Laboratory and field work.

GEOLOGY 112. HISTORICAL GEOLOGY Mr. Mahard, Mr. Graham. 4

History of the origin and development of the rocks and geologic structures of North America with accompanying emphasis upon the development of the animal and plant kingdoms. Laboratory and field work. Prerequisite: 111.

GEOLOGY 211. MINERALOGY Mr. Graham. 3

Identification of chief rock-forming and ore minerals. Crystal systems are studied. Minerals are studied in hand specimen, also as fragments and in thin-sections with polarizing microscope. Introduction to the study of ore deposits. Prerequisite: 111-112.

GEOLOGY 212. PETROLOGY Mr. Graham. 3

Identification of chief rock kinds in hand specimen; limited work with thin-sections. Classification of igneous and sedimentary rocks considered. Introduction to sedimentation and metamorphism. Prerequisite: 211.

GEOLOGY 311. STRUCTURAL GEOLOGY Mr. Graham. 3

Study of movements of solid rock and molten rock and their effect upon crustal features of the earth. Prerequisites: Geology 111, 112, and Geography 226.

GEOLOGY 312. ADVANCED PHYSICAL GEOLOGY AND GEOMORPHOLOGY 3

Intensive study of dynamic earth processes, both constructional and destructional, which determine nature of earth's crustal features both large and small; topographic and geologic map interpretation; field work. Prerequisites: Geology 111, 112, and 311; and Geography 226.

GEOLOGY 313. PALEONTOLOGY**Mr. Graham. 3**

A general study of fossil invertebrates, involving a comparison of the morphology of living and extinct types. Includes a study of the classification and geologic history of the various phyla.

GEOLOGY 314. STRATIGRAPHY AND SEDIMENTATION**Mr. Graham. 3**

A study of the principles of stratigraphy and correlation of sedimentary sequences in North America. Includes a study of the processes of sedimentation and the environments of deposition. Prerequisite: 111-112 and consent of instructor.

GEOLOGY 320. FIELD TRIP**Staff. 2**

An automobile trip during spring vacation to study the geomorphic provinces of Eastern United States.

GEOLOGY 400. FIELD COURSE**6**

A major in Geology must register for a summer field course offered by any one of a number of approved universities. Upon the successful completion of the course, he receives credit transferable to his record at Denison.

GEOLOGY 411-412. DIRECTED STUDIES**2-4**

Individual reading and laboratory work in a student's field of interest within geology. Work in petroleum geology is included.

GEOLOGY 461-462. INDIVIDUAL WORK FOR HONORS**3**

THE TEACHING OF SCIENCE (See Education 311.)

GEOGRAPHY

Normally a geography major is not available at Denison. A student who is interested in geography and who may wish to pursue this discipline at the graduate level might major in Economics, Sociology, or History. Such a student would elect 12-15 hours in Geography at Denison and would choose Geology as one of his years of science. Having completed such a program, a student will normally have little difficulty gaining admission to a graduate program in Geography at a high-ranking university.

GEOGRAPHY 221. PRINCIPLES OF GEOGRAPHY: PHYSICAL AND HUMAN**Mr. Mahard. 3**

Elements of the physical environment and their effects upon man.

GEOGRAPHY 226. GEOGRAPHY OF THE UNITED STATES**Mr. Mahard. 4**

Emphasis placed on origin of landscape features and geologic situation which accounts for distribution of natural resources. This pattern of landscape is related to economic development and human affairs.

GEOGRAPHY 230. GEOGRAPHY OF SOUTH AMERICA Mr. Mahard. 3
Environmental factors and their significance in the affairs of South America.

GEOGRAPHY 232. GEOGRAPHY OF EUROPE Mr. Mahard. 3
Environmental factors and their significance in the affairs of Europe; emphasis is placed upon geographic factors which play a role in current events in Europe.

GEOGRAPHY 241. GEOGRAPHY OF ASIA Mr. Mahard. 3
Asia is broadly studied to relate the environmental situation to the rapidly changing contemporary scene.

GEOGRAPHY 261. WORLD POLITICAL GEOGRAPHY Mr. Mahard. 3
A study of natural environment and earth-man relationships as they bear on the current world political situation. (An AFROTC Cadet may earn credit in this course in place of Air Science 402.)

GEOGRAPHY 421-422. DIRECTED STUDIES Mr. Mahard. 2-4
Readings in geography selected to enhance students' geographic comprehension.

GEOGRAPHY 461-462. INDIVIDUAL WORK FOR HONORS 3

GOVERNMENT

Mr. Stephens, Mr. Morrow, Mr. Wirt, Mr. Cory
Chairman (1959-62), Mr. Stephens

MAJOR IN GOVERNMENT

A student majoring in Government is required to take 211, 212, 421-422, and at least 18 semester-hours from other departmental courses. A major is expected to take Economics 211-212 and at least six semester-hours in History. Pre-law students should also take Economics 223-224 and History 335-336. Majors planning to do graduate study and those expecting to enter the foreign service must demonstrate a reading knowledge of a modern foreign language by the beginning of the senior year. Non-majors may take advanced courses with the consent of the instructor.

211. AMERICAN NATIONAL GOVERNMENT Mr. Stephens, Mr. Wirt,
Mr. Cory. 3

Study of the development, structure, and operation of our national government.

212. COMPARATIVE GOVERNMENT Mr. Stephens, Mr. Wirt, Mr. Cory. 3

A comparative study of different types of modern constitutions in relation to their social, economic, and ideological backgrounds. Great Britain, France, and the Union of Soviet Socialist Republics will be examined.

213. AMERICAN FEDERALISM Mr. Wirt. 3

An analysis of state and community governments in the American system. Attention is given to current tendencies: centralization of power in state and national centers, the strengthened executive, new policies. Students will interview officials for class reports illustrating elements of subject.

214. ADMINISTRATIVE POLICIES OF THE NATIONAL GOVERNMENT Mr. Wirt. 3

Analysis of growth and nature of federal policies. Description of administrative techniques of control (licensing, etc.) and analysis of policies both internal (budgeting, defense, government corporation) and external (business, labor, agriculture, conservation, social welfare, etc.).

231-232. BUSINESS LAW Mr. Morrow. 3

A survey of law as applied to business, covering the field of contracts, property, sales, negotiable instruments, agency, partnerships, corporations, insurance, bankruptcy, and labor relations. *This may not be counted toward a major in Government.*

301. POLITICAL PARTIES AND POLITICS Mr. Wirt. 3

Party history in terms of economic and social movements. Analysis of party structure, including group composition, machinery, and finances. Interpretation of party operations in the electoral process and government functions; nature of party responsibility.

302. PUBLIC OPINION AND POLITICAL PROCESSES Mr. Wirt. 3

Analysis of the nature of public opinion, how it is revealed, crystallized, and manipulated. Within this framework such items are studied as opinion polling, institutions of social control, interest group activity and policies, the channels of communication, propaganda techniques, and non-rational factors in politics.

311. INTERNATIONAL RELATIONS Mr. Wirt, Mr. Cory. 3

Examination of patterns of nation-state relations. Nationalism, sovereignty, and national power are revealed as foundations. Diplomacy and political, military and economic warfare are seen as modes of power. International law, balance of power, collective security, and peaceful settlement are evaluated as controls of interstate relations.

312. INTERNATIONAL ORGANIZATION

Mr. Cory. 3

An analysis of the place and potentialities of international organizations (United Nations, Organization of American States, European Federation) in international politics and economics. Evaluation of international efforts for peace through collective security, disarmament, and conciliation; efforts to raise living standards through technical assistance, capital development, and the encouragement of trade; efforts to increase the effectiveness of international government.

313. NATIONALISM IN THE NON-WESTERN WORLD

Mr. Cory. 3

An analysis of the new governments in economically underdeveloped regions and of their relationships to the West; case studies include China, India, and some nations in the Middle East and Africa. (Offered in 1961-62 and in alternate years.)

345. SOVIET GOVERNMENT AND DOMESTIC POLICIES

Mr. Wirt. 3

Soviet institutions are studied as means of coercion and persuasion available to modern totalitarian states, i.e., use of party, army, industry, unions, and cultural groups as instruments of oligarchical power. The relationship of state to worker and farmer, intellectual and scientist, party member and soldier is observed within the Lenin, Stalin, and Khrushchev eras.

350. WASHINGTON FIELD TRIP

Mr. Wirt. 2

A trip to observe the federal government in operation and to discuss significant issues with top officials. After intensive preparation, students spend the spring vacation in conference with policy advisers, makers, and administrators. *Consent of instructor.*

361-362. DIRECTED STUDY IN GOVERNMENT

Staff. 3

403. ANCIENT AND MEDIEVAL POLITICAL THOUGHT

Mr. Stephens. 3

The basic theories of European government from the time of Plato to Machiavelli.

404. MODERN AND CONTEMPORARY POLITICAL THOUGHT

Mr. Stephens. 3

The chief theories of European and American government from Machiavelli to the present.

411. CONSTITUTIONAL LAW

Mr. Morrow. 4

The American Constitutional system through the decisions of the Supreme Court; relationships between state and federal governments; recent trends in jurisprudence.

412. INTRODUCTION TO THE LAW

Mr. Morrow. 3

The history and meaning of law; the development of legal reasoning and philosophy; instrumentalities for the protection of rights; and the structure of the legal profession. *For pre-law students.*

421-422. SEMINAR

Staff. 2

Designed to give the student an opportunity to learn the techniques and methodology of sound research. The student will explain and defend a thesis before the other members of the seminar. *Required of all seniors majoring in Government.*

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF SOCIAL STUDIES (See Education 320.)

HISTORY

Mr. Utter, Mr. Stratton, Mr. Southgate, Mr. Pollock, Mr. Chessman,

Mr. Seager, Mr. W. Preston, Mr. Watson,

Mr. Huckaby, Mr. Todd, Mr. Dow

Chairman (1960-63), Mr. Southgate

MAJOR IN HISTORY

A minimum of 24 hours in History is required for a major. Courses specifically required include: 211-212, 221-222, 231. All of these required courses should be taken as soon as possible after the student declares a major in History.

By the beginning of the senior year, majors preparing for graduate study should have a reading knowledge of a modern foreign language.

211-212. MODERN EUROPE Messrs. Southgate, Pollock, Watson, Huckaby. 3

A survey of the major political, economic, diplomatic, social, and cultural developments in Europe since the 16th Century. Prerequisite: General Education 21-22 or consent of instructor.

221-222. AMERICAN CIVILIZATION

Messrs. Utter, Chessman, Seager, Preston, Todd. 3

A comprehensive survey of the history of America from colonial times to the present. Political, diplomatic, social, economic, and intellectual developments will be included.

231. HISTORICAL RESEARCH AND HISTORIOGRAPHY Staff. 3

A study of methods of historical research and writing, of the concepts with which the historian must deal, and of some of the writings of the great historians and of their differing views on the nature and purposes of the historical discipline. A number of research papers and essays are required. (Offered each semester.)

311. WORLD WAR I AND ITS AFTERMATH Mr. Pollock. 3**312. WORLD WAR II AND CONTEMPORARY WORLD EVENTS** Mr. Pollock. 3**321. AMERICAN ECONOMIC HISTORY** Mr. Preston. 3

The rise of modern industrial capitalism in the United States, with an emphasis upon the relationship of economic and political developments. Prerequisite: 221-222 or consent of instructor.

324. THE AMERICAN FRONTIER Mr. Utter. 3

The frontier in American economic, political, and cultural development. Prerequisite: 221-222 or consent of instructor.

327. AMERICAN DIPLOMACY IN THE 18TH AND 19TH CENTURIES Mr. Seager. 3

A survey of American foreign policy emphasizing the emergence and growth of the United States within the context of European power politics. Special attention is paid to the problems of territorial expansion, war and peace, and maritime neutral rights. Prerequisite: 221 or consent of instructor.

328. THE UNITED STATES AS A WORLD POWER Mr. Seager. 3

A survey of American diplomacy since 1898 emphasizing the increasing importance and influence of the United States in international politics. Special attention is paid to America's Far Eastern policy and United States relations with the Soviet Union. Prerequisite: 222 or consent of instructor.

330. AMERICAN SOCIAL AND INTELLECTUAL HISTORY Mr. Chessman. 3

A study of selected problems in American social and intellectual development. Prerequisite: 221-222 or consent of instructor. (Offered in alternate years.)

333. THE COLONIAL PERIOD OF AMERICAN HISTORY Mr. Todd. 3

A study of the economic, social, and political aspects of American History during the 17th and 18th centuries. (Offered in alternate years.)

335-336. HISTORY OF ENGLAND

Mr. Southgate. 3

A study of the social and cultural history and of the development of the English constitution against the background of political history from 1066 to 1776. (Offered in alternate years.)

337. MODERN BRITAIN

Mr. Watson. 3

A political, social, and cultural history of Great Britain from 1782 to the present. Prerequisite: History 211-212 or consent of instructor. (Offered in alternate years.)

341. HISTORY OF CHINA

Mr. Stratton. 3

A survey of the origin and formation of the basic patterns of Chinese traditional civilization, the Western impact and China's response, and the rise of Communism in modern China. (Offered in alternate years.)

342. HISTORY OF JAPAN

Mr. Stratton. 3

An analysis of the origins and development of Japan's traditional society, her modernization and expansion, and subsequent reorganization since World War II. (Offered in alternate years.)

343. HISTORY OF INDIA

Mr. Stratton. 3

An introductory survey of the origin and formation of India's traditional Hindu culture, followed by consideration of the Moslem and Western intrusions, the rise of Indian nationalism, and the problems of independent India and Pakistan. (Offered in alternate years.)

349-350. THE MIDDLE AGES

Mr. Southgate. 3

A seminar in the development of European ideas and institutions from the high Middle Ages to the Renaissance. (Offered in alternate years.)

351-352. EARLY MODERN EUROPE

Mr. Huckaby. 3

A study of certain aspects of the history of European thought and institutions from the 16th century to the French Revolution. (Offered in alternate years.)

355. SURVEY OF RUSSIAN HISTORY

Mr. Huckaby. 3

A study of the development of Russian civilization and the state from the Middle Ages to the present.

361-362. DIRECTED STUDY IN HISTORY

Staff. 3

431-432. SEMINARS IN HISTORY

Staff. 3

Seminars are open to superior students with consent of the instructor. These courses will involve the preparation of a research

paper, and will be offered (as registration warrants) in the fields that follow:

a. Early American History	Mr. Todd
b. Old Northwest	Mr. Utter
c. American Diplomatic History	Mr. Seager
d. American Social and Intellectual History	Mr. Chessman
e. American Political and Economic History	Mr. W. Preston
f. Tudor England	Mr. Southgate
g. Victorian England	Mr. Watson
h. Far Eastern History	Mr. Stratton
i. Africa: South of the Sahara	Mr. Pollock
j. The Enlightenment in Europe	Mr. Huckaby
k. Modern European Intellectual History	Mr. Watson

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF SOCIAL STUDIES (See Education 320.)

MATHEMATICS

Mr. Kato, Miss Wetzel, Mr. Sterrett, Mr. Grudin, Mr. Prentice, Mr. Craft
Chairman (1960-63), Mr. Sterrett

MAJOR IN MATHEMATICS

Minimum requirements for a major in Mathematics are 121-122, 221-222, 459-460, and three additional courses. Mathematics 108, 203, 205-206, and Education 335 may not be counted in meeting minimum requirements. Both 211-212 and 213 may be substituted for 121-122 and 221-222.

A student majoring in Mathematics with emphasis upon statistics will take courses 307-308 and 407-408.

Those desiring recommendation for graduate study in Mathematics must take 321-322, and should take as many courses as possible from Mathematics 307-308, 365-366, 375-376, and 353. A reading knowledge of French and German is also recommended.

Both 365 and 375 are recommended for a student who plans to teach mathematics in secondary schools.

General Education 40a is a terminal course. A student desiring more work in the department will then continued with Mathematics 121.

All majors will elect, after consultation with the chairman of the department, a minimum of 12 hours in subjects related to Mathematics.

108. MATHEMATICS OF FINANCE

Staff. 3

Interest and annuities, life insurance, and reserves. Prerequisite: General Education 40a or Mathematics 121 or consent of instructor.

121-122. ELEMENTARY MATHEMATICAL ANALYSIS

Staff. 4

Introduces elementary ideas of The Calculus at the start and uses them throughout the course in an integrated study of topics in algebra and analytic geometry, including an introduction to solid analytic geometry. A fifth hour will be arranged for a part of the first semester for students who have had no plane trigonometry. Prerequisite: Three years of high school mathematics, General Education 40a or consent of instructor.

203. SOCIAL STATISTICS

Mr. Prentice. 3

Adapted to students in Personnel Administration, Psychology, and Sociology.

205-206. ECONOMIC STATISTICS

Mr. Sterrett. 3

Adapted to students in Economics. Prerequisite: General Education 40a or 121.

**211-212. FRESHMAN HONORS SECTION IN ELEMENTARY
MATHEMATICAL ANALYSIS**

Staff. 5

An honors course for selected freshmen which treats of analytic geometry and an introduction to The Calculus as an integrated course.

213. SOPHOMORE HONORS SECTION IN THE CALCULUS

Mr. Kato. 4

Includes such topics as partial differentiation, multiple integrals, infinite series, and an introduction to differential equations. Prerequisite: 212.

221-222. THE CALCULUS

Staff. 4

Includes such topics as partial differentiation, multiple integrals, and expansion of functions into infinite series. Prerequisite: 122.

307-308. MATHEMATICS OF STATISTICS

Mr. Sterrett. 3

Introduction to the theory and applications of mathematical statistics, including the topics: frequency distributions of one and two variables, sampling theory, elementary probability, multiple and partial correlation, and generalized frequency distributions. Prerequisite: 222 or consent of instructor.

311-312. TECHNICAL MECHANICS**Mr. Prentice. 3**

The principles of applied mechanics with reference to their application to engineering. Prerequisites: 222 and Physics 121-122. (Offered in 1961-62 and in alternate years.)

317-318. CALCULUS OF FINITE DIFFERENCES**Mr. Sterrett. 2**

Finite integration, interpolation, difference equations. Prerequisite: 222.

321-322. ADVANCED ANALYSIS**Miss Wetzel. 3**

The principal topics are partial differentiation, Riemann and Stieltjes integrals, indeterminate forms, infinite series, improper integrals, Fourier series, and Laplace transform. Prerequisite: 222 or consent of instructor.

353. DIFFERENTIAL EQUATIONS**Mr. Grudin. 4**

Introductory course. Prerequisite: 222.

361-362. DIRECTED STUDY IN MATHEMATICS**Staff. 3****365-366. MODERN ALGEBRA****Mr. Grudin. 3**

Introduction to concepts of Algebra: Number system, theory of numbers, determinants, matrices, domains, rings. Consent of instructor. (Offered in 1961-62 and in alternate years.)

375-376. MODERN GEOMETRY**Mr. Craft. 3**

Topics will be selected from projective geometry, non-Euclidean geometry, and topology. (Offered in 1960-61 and in alternate years.)

407-408. PROBABILITY THEORY**Miss Wetzel. 3**

Introduction to the theory and applications of probability. Prerequisite: 308 or consent of instructor.

453. VECTOR ANALYSIS WITH INTRODUCTION TO TENSOR ANALYSIS**Mr. Kato. 4**

Prerequisites: 321 or 353 and Physics 121-122.

459-460. SENIOR SEMINAR**Mr. Grudin, Miss Wetzel. 2-3**

Advanced topics, based on the student's knowledge and interests. Credit is withheld until completion of both semesters.

461-462. INDIVIDUAL WORK FOR HONORS**Staff. 3**

THE TEACHING OF MATHEMATICS (See Education 335.)

MODERN LANGUAGES

Mr. Secor, Mr. F. L. Preston, Mr. Bancroft,
Mr. Steele, Mr. Stern, Mr. Emont,
Mr. Jonaitis, Mr. Hirshler, Mr. Dolin, Mr. Poyatos, Mr. Egli
Chairman (1958-61), Mr. Secor

MAJOR IN MODERN LANGUAGES

A major in this department must complete a minimum of 24 semester-hours above the first-year level in the language. A maximum of 52 semester-hours is allowed providing not more than 36 semester-hours are in one language, not counting elementary courses. At least a reading knowledge of a second modern language is highly desirable for a major. A major's sequence of courses is arranged in conference with the chairman of the department.

No credit is given for less than a year of beginning work.

A student has access to the Language laboratory for aural training by record and by radio.

THE TEACHING OF MODERN LANGUAGES (See Education 343.)

FRENCH

Mr. Secor, Mr. F. L. Preston, Mr. Emont, Mr. Jonaitis, Mr. Dolin, Mr. Egli

101-102. AREA STUDY: FRANCE Mr. Secor. 2

The cultural background and significant contemporary sociological and economic problems of the area; its position in the affairs of the world today, and its relation to the United States. Offered in the English language.

111-112. INTRODUCTION TO THE FRENCH LANGUAGE Staff. 4211-212. INTERMEDIATE FRENCH Staff. 3

Reading, grammar review, and conversation. Prerequisite: Two years of high school French or one year of college French.

213-214. CONVERSATION AND COMPOSITION Staff. 2

To accompany 211-212 for those students who wish to develop greater language skill. May be taken either semester or both semesters.

311-312. AN INTRODUCTION TO FRENCH LITERATURE
AND CIVILIZATION

Mr. Emont, Staff. 3

First semester: Readings from such modern writers as Gide, Mauriac, Sartre, Duhamel, Colette, Saint-Exupéry, Proust and Cornus. Second semester: Readings from such authors as Molière,

Corneille, Racine, Rousseau, Voltaire, Hugo, Balzac, Rabelais and Montaigne. Prerequisite: four years of high school French or two years of college French.

313-314. ADVANCED CONVERSATION Mr. Jonaitis. 2
Composition as needed. Prerequisite: 311-312. (Offered in 1961-62 and in alternate years.)

317. THE CLASSIC DRAMA Mr. Preston. 3
Corneille, Racine, Molière. Prerequisite: 311-312. (Offered in 1960-61 and in alternate years.)

318. EIGHTEENTH CENTURY LITERATURE Mr. Preston. 3
Voltaire, Rousseau, Montesquieu, Diderot, and the leading playwrights and novelists of the century. Prerequisite: 311-312. (Offered in 1960-61 and in alternate years.)

319. NINETEENTH CENTURY PROSE AND POETRY Mr. Secor. 3
Novel: Chateaubriand, through Balzac, Flaubert, de Maupassant to contemporary writers. Critics: Sainte Beuve, Taine, Renan. Poets from the Romanticists through the Symbolists. Prerequisite: 311-312. (Offered in 1961-62 and in alternate years.)

320. NINETEENTH AND TWENTIETH CENTURY THEATRE Mr. Secor. 3
The Romantic, Realistic-Social, Naturalistic Schools, and modern trends including Camus, Anouilh, Montherlant, and Claudel. Prerequisite: 311-312. (Offered in 1961-62 and in alternate years.)

361-362. DIRECTED STUDY IN FRENCH Staff. 3

415-416. ADVANCED FRENCH GRAMMAR AND WRITING Mr. Secor. 2
(Offered in 1960-61 and in alternate years.)

418. SENIOR SEMINAR Staff. 2
Advanced study of special problems based on student's needs, knowledge, and interests.

461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

GERMAN

Mr. Stern, Mr. Hirshler

101-102. AREA STUDY: GERMANY Mr. Hirshler. 2
The cultural background and significant contemporary sociological and economic problems of the area; its position in the affairs of the world today, and its relation to the United States. Offered in the English language.

- 111-112. INTRODUCTION TO THE GERMAN LANGUAGE Staff. 4
- 211-212. INTERMEDIATE GERMAN Staff. 3
Reading, grammar review, and conversation. Prerequisite: Two years of high school German or one year of college German.
- 213-214. CONVERSATION AND COMPOSITION Staff. 2
This course accompanies 211-212 for those students who wish to develop greater language skill. May be taken either semester or both semesters.
- 215-216. SCIENTIFIC GERMAN LITERATURE Mr. Stern. 3
Prerequisite: 111-112 or two years of high school German, and consent of instructor.
- 311-312. AN INTRODUCTION TO GERMAN LITERATURE Mr. Stern. 3
Readings from leading German literary figures with an emphasis on authors of the 20th century, such as Kafka, Thomas Mann, Rilke, Hofmannsthal, Brecht. First semester: The Drama. Second semester: Prose and poetry. Prerequisite: Three or four years of high school German or two years of college German, 212 or 216 or equivalent. (Offered in 1960-61 and in alternate years.)
- 313-314. ADVANCED CONVERSATION Mr. Stern. 3
Advanced conversation. Composition as needed. Prerequisite: 213-214 or 211-212 or consent of instructor.
317. GERMAN CLASSICS Mr. Stern. 3
Lessing, Schiller, and the classical German drama. Prerequisites: 212, 214, or 216, or three years of high school German. (Offered in 1961-62 and in alternate years.)
318. GOETHE'S WORKS Mr. Stern. 3
Selections. Prerequisites: 212, 317, or 319 or consent of instructor. (Offered in 1961-62 and in alternate years.)
319. NINETEENTH CENTURY PROSE Mr. Stern. 3
Beginning with the Romanticists and including recent literary movements represented by Hauptmann, Schnitzler, Thomas Mann, and other leading writers. Prerequisite: Same as for 317. (Offered in 1962-63.)
320. NINETEENTH CENTURY DRAMA Mr. Stern. 3
Kleist, Grillparzer, Hebbel, Hauptmann, and others. Prerequisite: Same as for 318. (Offered in 1962-63.)
- 361-362. DIRECTED STUDY IN GERMAN Staff. 3

415. SURVEY OF GERMAN LITERATURE BEFORE 1700 Mr. Stern. 2
Prerequisite: Any 300-course or any two 200-courses, including 211, 212.
416. SURVEY OF GERMAN LITERATURE AFTER 1700 Mr. Stern. 2
Prerequisite: Same as for 415.
- 461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

ITALIAN

- 111-112. INTRODUCTION TO THE ITALIAN LANGUAGE 4
(Offered upon demand.)

PORTUGUESE

- 111-112. INTRODUCTION TO THE PORTUGUESE LANGUAGE 4
(Offered upon demand.)
- 211-212. INTERMEDIATE PORTUGUESE
(Offered upon demand.)

RUSSIAN

Mr. Jonaitis

- 111-112. INTRODUCTION TO THE RUSSIAN LANGUAGE 4
- 211-212. INTERMEDIATE RUSSIAN 3
Reading, grammar review, and conversation. Prerequisite. Two years of high school Russian or one year of college Russian.

SPANISH

Mr. Bancroft, Mr. Steele, Mr. Emont, Mr. Poyatos

- 101-102. AREA STUDY: LATIN AMERICA Mr. Bancroft. 2
The cultural background and significant contemporary sociological and economic problems of the area; its position in the affairs of the world today, and its relation to the United States. Offered in the English language.
- 111-112. INTRODUCTION TO THE SPANISH LANGUAGE Staff. 4
- 211-212. INTERMEDIATE SPANISH Staff. 3
Reading, grammar review, and conversation. Prerequisite: Two years of high school Spanish or one year of college Spanish.

213-214. CONVERSATION AND COMPOSITION Mr. Steele. 2

To accompany 211-212 for those students who wish to develop greater language skill. May be taken either semester or both semesters.

311-312. INTRODUCTION TO SPANISH LITERATURE AND CIVILIZATION Mr. Bancroft, Mr. Steele. 3

Readings from leading Spanish literary figures including Lope de Vega, Cervantes, Pérez Galdós, and others; and a study of the outstanding figures and periods of Spanish culture. Prerequisite: Three or four years of high school Spanish or 211-212.

313. COMMERCIAL SPANISH Mr. Steele. 2

Letters and forms used in business. Prerequisite: 211-212 or equivalent. (Offered in 1960-61 and in alternate years.)

314. ADVANCED CONVERSATION Mr. Steele. 2

Composition as needed. Prerequisite: 213-214, or 211-212 or consent of instructor. (Offered in 1960-61 and in alternate years.)

317-318. HISPANIC LITERATURE TO 1700 Mr. Bancroft. 3

A survey of the major medieval and Renaissance works and literary currents with emphasis on *El Cid*, *El libro de buen amor*, Jorge Manrique, the ballad, *La Celestina*; the 16th century precursors to the Golden Age, including the pre-Lopean drama and *Lazarillo de Tormes*; the literature of discovery and conquest in America (first semester).

The major authors and works of the second half of the 16th and the 17th centuries. In Spain: the mystics, Lope de Vega and his followers, Cervantes, Góngora, and Quevedo; American authors: Ercilla y Zúñiga, Sor Juana Inés de la Cruz (second semester). Prerequisite: 311-312. (Offered in 1960-61 and in alternate years.)

319-320. HISPANIC LITERATURE SINCE 1700 Mr. Steele. 3

Romanticism and realism in Spain and Spanish America, with a preliminary view of the preceding Neo-classic tendencies. Espronceda, Duque de Rivas, Sarmiento, José Hernández, Larra, Zorilla, Bécquer, Galdós, and other writers of the 19th century (first semester).

Modernismo and the Generation of '98 and subsequent leading tendencies and works to the present time. Rubén Darío, Unamuno, Benavente, A. Machado, Jiménez, Ortega y Gasset, Lorca, Gabriela Mistral, Mariano Azuela, and other writers (second semester). Prerequisite: 311-312. (Offered in 1961-62 and in alternate years.)

361-362. DIRECTED STUDY IN SPANISH Staff. 3

- 413-414. ADVANCED COMPOSITION AND SYNTAX Mr. Bancroft. 2
 (Offered in 1961-62 and in alternate years.)
418. SENIOR SEMINAR Staff. 2
 Advanced study of special problems based on student's needs, knowledge, and interests.
- 461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

MUSIC

Mr. Eschman, Mr. Stark, Mr. Miller, Mr. Larson,
 Mr. Moore, Mr. Hunter, Mr. Bellino, Mr. York, Mr. Wolfrom (part-time)
 Chairman (1958-61), Mr. Moore

MAJOR IN MUSIC

All courses listed grant credit, as indicated, toward the Bachelor of Arts degree, the Bachelor of Music degree, or the Bachelor of Music (Music Education). Any student in the University may elect courses to a maximum of 40 semester-hours (including four hours in Ensemble Music) under the B.A. degree, 88 hours under the Mus.B. degree, or 68 hours under the Bachelor of Music (Music Education). Those who are studying for a degree in Applied Music or Music Education will pay the regular college tuition but no additional charges for private lessons. (For costs to others, see Expenses.)

103-104. CHOIR, ORCHESTRA, BAND OR ENSEMBLE TRAINING

Mr. Moore, Mr. Bellino, Mr. Hunter. 1

Three hours are required for one hour of college credit each semester, one being in Concert Choir, Orchestra, Band, or Mixed Choir; the others are elective ensemble music.

105-106. OPERA WORKSHOP

Mr. Larson. 1

A course in the history and performance of operas.

107-108. CHAMBER MUSIC WORKSHOP

Mr. Bellino, Mr. Hunter. 1

A course in the style and performance of chamber music.

111-112. FUNDAMENTAL MUSICIANSHIP

Mr. Eschman. 1 or 2

Required of all freshmen majoring in Music. Rhythmic, melodic, and harmonic dictation, sight-singing, solfeggio and keyboard training. (One hour of credit for A.B. students; two hours of credit with additional assignments for Mus.B. students.)

- 121-122. HARMONY Mr. Eschman. 3
Required of all freshmen majoring in Music.
201. HISTORY OF MUSIC TO THE 18th CENTURY Mr. Stark. 3
Alternates with 311-312. (Offered in 1961-62 and in alternate years.)
202. HISTORY OF MUSIC FROM THE 18th CENTURY TO THE PRESENT
TIME Mr. Stark. 3
(Offered in 1961-62 and in alternate years.)
- 203-204. CHOIR, ORCHESTRA, BAND OR ENSEMBLE TRAINING
Mr. Moore, Mr. Bellino, Mr. Hunter. 1
- 205-206. APPRECIATION OF MUSIC Mr. Stark. 2
Offered without prerequisites in musical training or experience.
- 211-212. ADVANCED MUSICIANSHIP Mr. Stark. 2
Prerequisite: 111-112.
- 221-222. ADVANCED HARMONY Mr. Eschman. 3
Increased vocabulary in composition. Prerequisite: 121-122.
228. MUSIC IN THE CHURCH Mr. Moore. 2
A history of music in the Western Church. A comparison of the various liturgies and the function of music in the present-day churches, including hymnology. Open to and especially recommended for pre-ministerial students and music majors. Prerequisite: Junior or senior standing. (Offered first semester 1960-61 and in alternate years.)
- 303-304. SCORE READING AND CONDUCTING Mr. Hunter. 1
Alternates with 305, 306.
- 305-306. ORCHESTRATION Mr. Hunter. 1
One hour of lecture and one hour of laboratory. Alternates with 303.
- 311-312. MUSICAL FORM Mr. Eschman. 2
Analysis of the principal instrumental forms. Alternates with 201 and 202. (Offered in 1960-61 and in alternate years.)
314. SURVEY OF PIANO LITERATURE Mr. Miller, Mr. York. 2
A study of the development of keyboard music from the 16th century through contemporary music.
- METHODS IN MUSIC EDUCATION Mr. Hunter
The psychology and problems of teaching public school music applied to present day practices. (See Education 315, 316.)

331-332. COUNTERPOINT

Mr. Stark. 3

The principles of harmony applied to the melodious treatment of two or more voice parts in combination. Prerequisite: 221-222 and some proficiency in piano playing.

441-442. COMPOSITION

Mr. Eschman. 2

Composition of vocal and instrumental works in strict and free styles. Prerequisite: 221-222 and some proficiency in piano or organ playing.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

CLASS LESSONS IN APPLIED MUSIC

141. WOODWIND INSTRUMENTS CLASS

Mr. Hunter. 1

Class instruction for majors in Music Education.

142. BRASS INSTRUMENTS CLASS

Mr. Hunter. 1

Class instruction for majors in Music Education.

151-152. STRING INSTRUMENTS CLASS

Mr. Bellino. 1

Class instruction for majors in Music Education.

161-162. VOICE CLASS

Mr. Larson. 1

Class lessons in voice. Recommended for the improvement of the speaking as well as the singing voice.

PRIVATE LESSONS IN ORGAN, PIANO, VIOLIN, VIOLONCELLO,
VOICE, AND WIND INSTRUMENTS (For credit, see below.)

Instruction is in private lessons and the need of the individual student at any level of instruction is met.

MAJOR IN APPLIED MUSIC

Credit in Applied Music to a total of eight semester-hours may be obtained toward the B.A. degree by a major in any department. A major in Applied Music may elect 16 hours in Applied Music, and 16 hours in Applied Music are required in the Bachelor of Music (Music Education) degree. One credit is given for one lesson a week and one hour of practice a day. Two credits are given for two lessons a week and two hours of practice daily. The former will be given the name of the subject: Piano, etc., and the numbers 111-112, 211-212, 311-312, 411-412 depending upon the year of study. The two-hour credit courses will be numbered 121-122, 221-222, etc.

In Applied Music 48 semester-hours are required for the Bachelor of Music degree in performance major. A student must register for Piano, Voice, Violin, Organ, Wind Instruments, or Violoncello; 131-132, 231-232, etc., three hours of credit, 141-142, 241-242, etc., four hours of credit. (In each case the first digit of the course-number indicates the year, the second the number of credits, and the third digit, the semester in which the course was taken.)

PHILOSOPHY

Mr. Titus, Mr. Hepp, Mr. Bayley, Mr. Macoskey

Chairman (1960-63), Mr. Titus

MAJOR IN PHILOSOPHY

A major in Philosophy requires 24 semester-hours, preferably in sequence, the courses to be selected in consultation with the members of the staff on the basis of the interests and needs of the student. *The basic course in Logic is General Education 40b and is required of majors.*

303. BASIC PROBLEMS IN PHILOSOPHY

Mr. Titus. 3

A study of representative philosophical issues and problems as presented in selections from modern philosophical literature. (This course, together with Religion 303, satisfies the General Education 81 requirement.)

312. SYMBOLIC LOGIC

Mr. Bayley. 3

A study of the special symbols used for analysis and deduction and the principles and methods basic to the construction of logistic systems. *May not be counted toward fulfilment of the General Education 81 requirement.* (Offered second semester 1960-61 and in alternate years.)

321. ETHICS FOR TODAY

Mr. Titus. 2, 3, 4

A study of the development, nature, and theories of morality with special emphasis given to present-day problems of personal and social morality. (Consent of instructor required to register for 4 hours' credit.)

323-324. MODERN SOCIAL PHILOSOPHIES: Year Course

Mr. Titus. 3

A more thorough study of modern social philosophies. (See 326 for content.) 323 is prerequisite for 324.

326. MODERN SOCIAL PHILOSOPHIES: One Semester Mr. Titus. 2, 3, 4

Examination of the social philosophy underlying democracy, capitalism, the consumers' cooperative movement, democratic socialism, communism, fascism, liberalism, etc. (Consent required to register for 4 hours' credit.)

327. THE PHILOSOPHY OF CIVILIZATION Mr. Titus. 3

A seminar dealing with the sources of Western civilization and recent philosophies of civilization as set forth by Spengler, Schweitzer, Toynbee, Whitehead, Northrop, and others. Junior standing and consent of instructor.

331. HISTORY OF PHILOSOPHY Mr. Hepp. 3

Investigation of origins of Western philosophy and science, followed by first-hand study of philosophical classics from Plato and Aristotle to Augustine and Thomas Aquinas. (Offered in 1960-61 and in alternate years.)

332. HISTORY OF PHILOSOPHY Mr. Hepp. 3

Modern philosophies which have shaped the contemporary mind. First-hand acquaintance with the philosophical classics from Descartes to Kant. (Offered in 1960-61 and in alternate years.)

333. NINETEENTH CENTURY PHILOSOPHY Mr. Hepp. 3

Work of such philosophers as Hegel, Schopenhauer, Comte, J. S. Mill, Engels, Nietzsche, and Kierkegaard. (Offered in 1961-62 and in alternate years.)

334. CONTEMPORARY THOUGHT Mr. Hepp. 3

Present-day philosophical movements such as instrumentalism, process philosophy, logical positivism, and existentialism as set forth by men such as Russell, Dewey, Whitehead, Ayer, Sartre, and Marcel. (Offered in 1961-62 and in alternate years.)

343. ORIENTAL PHILOSOPHY Mr. Hepp. 3

Philosophies of the East from ancient times to the present, with emphasis on the classical period. Firsthand acquaintance with the classics in translation and with more recent philosophical literature. (Offered in 1961-62, when the course will center on Chinese philosophy, and in alternate years.)

361-362. DIRECTED STUDY IN PHILOSOPHY Staff. 3**401. PHILOSOPHY OF RELIGION** Mr. Titus. 3

A seminar on the origin, development, nature, and problems of religion, and the types of religious philosophy. Open to juniors by consent of instructor.

403. PHILOSOPHY OF SCIENCE

Mr. Hepp. 3

An examination of the nature of man's scientific interest and of philosophical issues arising out of work in the sciences. Prerequisites: senior standing and either a science major or completion of General Education requirements in Life Science and Physical Science. Open to qualified juniors by consent.

420. THE PHILOSOPHY OF EDUCATION

Mr. Macoskey. 3

An inquiry into the philosophical issues associated with education including such problems as The School in Relation to Society and The Aims and Values of Education. The educational philosophies of pragmatism, realism, idealism, and existentialism are critically evaluated. Same as Education 420.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

PHYSICAL EDUCATION

MEN—Mr. Yard, Mr. Piper, Mr. Shannon, Mr. R. S. Scott,
Mr. Hill, Mr. Doherty, Mr. F. L. Martin
Chairman (1959-62), Mr. Yard

WOMEN—Miss Shepard, Mrs. Northrop, Miss Ross, Miss Van Horn,
Miss Lunt, Miss Daviess (part-time)
Chairman (1959-62), Miss Shepard

REQUIRED COURSES FOR MEN

Physical Education is required of all non-veteran freshman and sophomore men three periods a week, each course earning one hour of credit each semester.

Veterans who have six or more months of military service prior to entering Denison will be granted four semester-hours of credit to be recorded as Physical Education 111-112 and 211-212. Any veteran who attended college prior to his military service will be granted only enough additional credit in Physical Education to meet the graduation requirement of four semester-hours.

Credit in four of the five sports skills courses offered in 111-112 and 211-212 are needed to meet the graduation requirement.

111-112. SPORTS SKILLS

Staff. 1

- A. Basketball and badminton
- B. Paddle ball and tumbling and apparatus
- C. Golf benning and wrestling

211-212. SPORTS SKILLS

Staff. 1

D. Tennis and trampoline

E. Volleyball and handball

Majors or minors in the department may enroll for 311, 312 in the junior year with the consent of the chairman of the department.

REQUIRED COURSES FOR WOMEN

Physical Education is required of all freshman and sophomore women on a basis of three hours a week for freshmen during their first semester and two sessions a week for the following three semesters. Each semester course earns one hour of credit.

111-112. FOR FRESHMEN

Staff. 1

Orientation program first semester, plus elective work from activities listed: archery, badminton, bowling, square dancing, modern dance, fencing, golf, hockey, horseback riding, lacrosse, outing activities, swimming, tennis, and volleyball.

211-212. FOR SOPHOMORES

Staff. 1

Elective work from activities as listed above with emphasis on advanced work.

Majors or minors in the department may enroll for 311, 312 in the junior year with the consent of the chairman of the department.

MAJOR IN HEALTH AND PHYSICAL EDUCATION

Advanced courses are offered for students desiring to become teachers of Health and Physical Education in public or private schools.

Department requirements for the State Provisional High School Certificate valid for teaching this subject in combination with other teaching majors in grades 7-12 include 30 semester-hours.

Men majors must also participate on at least two varsity sports' squads or serve as a service class assistant for two semesters or serve as an assistant intramural manager for two semesters.

The 30-hour requirement includes Biology 201-202, Physical Education 321w-322w, or 4 hours from 325, 326 or 328; 248, 438, 443, and 463; and Education 352, 354, and 445. In addition, courses in Education 213, 217, 420, 415, and 416 are necessary for State certification.

MAJOR IN DANCE AND PHYSICAL EDUCATION

This course structure is designed to provide emphasis in the special area of dance for the student who wishes preparation for teaching and leadership in college, private or public school, or community agencies. The requirement includes 311, 312, 305, 306, 354, 361-362, Dance Club and Honors project, and 423; Biology 201-202; Education 352; Physical Education 321w-322w, 443, and 463. If the student wishes State certification for public school teaching, the required courses in Education must be added.

The student may take six hours of dance technique in graded progressive sequences, six hours of Directed Study, and a possible six hours of Honors work involving Advanced Composition, Production, and Methods of Teaching.

MAJOR IN DANCE AND THEATRE ARTS

A common interest in Dance and Theatre Arts may be met by completion of the following courses: Physical Education 311, 312, 305, 306, 354, 361-362, Dance Club and Honors Project and 423; Theatre Arts 111-112, 227-228, 215-216, 217, 218, and 324.

This major prepares the student for advanced study and for teaching the related arts in private school or college.

COURSE PLAN

119. FIRST AID Mr. Yard. 2
The course follows the American Red Cross Manual and meets the requirements for the Standard and Advanced First Aid Certificate and also includes a unit in Athletic Injuries.

124. CAMPING AND OUTDOOR EDUCATION Miss Ross. 2
The summer camp as an educational and recreative agency. Designed to prepare students for counselorship.

HUMAN ANATOMY AND PHYSIOLOGY 6
(See Biology 201-202.)

215. INTRODUCTION TO COMMUNITY RECREATION Miss Shepard. 3
An introductory course in the principles, organization, and administration of community recreation.

235m-236m. SPORTS OFFICIATING

Mr. Hill. 2

Methods and techniques of officiating both interscholastic and intramural athletic contests. Football and basketball units are designed to prepare students for the State of Ohio officials' examination. Two hours each of theory and of laboratory are given. Prerequisite: Sophomore standing.

248. PERSONAL AND COMMUNITY HYGIENE

Miss Van Horn. 4

Prerequisite: General Education 51-52 or Biology 201-202.

305. BEGINNING COMPOSITION FOR DANCE

Mrs. Northrop. 2

An introductory course in the rhythmic structure of dance including problems in line, contour, dynamic and meaning, space design and composition for groups; pre-classic dance forms, the use of accompaniment. Experience in analysis and critique or original compositions. The final examination includes organization for and participation in a workshop presentation.

306. INTERMEDIATE COMPOSITION FOR DANCE

Mrs. Northrop. 2

Solo and group choreography designed, directed, costumed, lighted, and performed by class members as part of the annual Spring Dance program. Prerequisite: 305.

321w-322w. SPORTS TECHNIQUES (Women)

Staff. 2

Methods and materials for teaching the various team, individual, and dual sports in season.

325m. SPORTS TECHNIQUES (Football)

Mr. Piper. 2

Methods and materials for teaching football. (Offered in alternate years.)

326m. SPORTS TECHNIQUES (Track and Baseball)

Mr. Shannon, Mr. Hill. 2

Methods and materials for teaching track and baseball. (Offered in alternate years.)

328m. SPORTS TECHNIQUES (Basketball)

Mr. R. Scott. 2

Methods and materials for teaching basketball. (Offered in alternate years.)

**METHODS AND MATERIALS IN PHYSICAL EDUCATION FOR THE
ELEMENTARY AND HIGH SCHOOL PROGRAMS**

Miss Shepard. 4

(See Education 352.)

METHODS IN RECREATIONAL DANCE

Miss Van Horn. 2

(See Education 354.)

361-362. DIRECTED STUDY

Staff. 3

423. DANCE AS AN ART FORM Mrs. Northrop. 3
Historical and philosophical concepts, theory and practice of teaching.
438. SENIOR SEMINAR IN PHYSICAL EDUCATION Miss Shepard, Mr. Yard. 2
443. PHYSIOLOGY OF EXERCISE AND KINESIOLOGY Miss Ross. 2
Prerequisite: Biology 201-202.
444. ADAPTIVE PHYSICAL EDUCATION Miss Ross. 2
Individual or adapted physical education, including corrective, restricted, and therapeutic activities, their teaching, and administration. Prerequisite: 443.
- PRINCIPLES, ORGANIZATION, ADMINISTRATION METHODS AND MATERIALS FOR SCHOOL HEALTH EDUCATION Mr. Yard. 3
(See Education 445.)
463. PRINCIPLES, ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION Miss Shepard. 3

PHYSICS

Mr. Leon E. Smith, Mr. Howe, Mr. Wheeler
Chairman (1960-63), Mr. Wheeler

MAJOR IN PHYSICS

The major sequence in Physics consists of courses 121-122, 211-212, with 12 additional hours in courses numbered higher than 300. Students who expect to follow the 3-2 engineering plan or to major in the physical sciences are advised to take at least 121-122, 211-212. A student preparing for graduate work in Physics should elect courses 311, 312, 313, 314, 321-322, and 344. An engineering student will find 431-432 useful. The sequence 115-116 satisfies the Physics requirement for students expecting to enter medicine or dentistry.

115-116. ELEMENTARY PHYSICS Staff. 4

Lecture demonstrations, recitations and one three-hour laboratory period covering the more important principles of mechanics and heat (first semester); electricity, magnetism, wave motion, light, and sound (second semester). This is a service course for premedical, pre-dental, and pre-technician students. Prerequisites: One year of high school physics or consent of instructor; Mathematics 121-122 or General Education 40a should accompany or precede this course.

121-122. GENERAL PHYSICS**Staff. 5**

Lecture demonstrations, recitations and one three-hour laboratory period dealing in a rather rigorous manner with mechanics and heat (first semester); electricity, magnetism, wave motion, light, and sound (second semester). This is the basic Physics course for students who are majoring in the physical sciences, physics, mathematics, chemistry, and preengineering. Prerequisite: One year of high school physics or consent of instructor; Mathematics 121-122 or 211-212 should accompany or precede this course.

211-212. LABORATORY PHYSICS**Staff. 3**

A second-year course in general physics consisting of one lecture and two three-hour laboratory periods designed to integrate, correlate, and extend the concepts and methods of physics in theory and experiment by thorough mathematical discussion of theory applied to more demanding experiments in mechanics, molecular physics, and heat (211); sound, magnetism, electricity, and optics (212). For pre-engineering and physical science students. Prerequisite: First year college physics; concurrent registration in The Calculus.

311. ELECTRICAL MEASUREMENTS**Mr. Howe. 3**

A secondary laboratory course in which the theory and practice of precise methods of electrical measurement are presented. The theoretical course to accompany this is 313. Prerequisites: 211-212 and The Calculus.

312. LIGHT**Mr. Smith. 3**

A secondary laboratory course dealing with experiments in geometric optics, diffraction, interference, polarization, and some practice with a spectrograph. Course 314 normally accompanies this course. Prerequisites: 211-212 and The Calculus.

313. MAGNETISM AND ELECTRICITY**Mr. Smith. 3**

A secondary course dealing with fundamental laws of electric and magnetic fields, steady currents, electromagnetic induction, D.C. and A.C. circuits. Vector methods are introduced and used. Laboratory course 311 is recommended as an accompanying course. Prerequisites: 211-212 and The Calculus. (Offered in 1960-61 and in alternate years.)

314. GEOMETRIC AND PHYSICAL OPTICS**Mr. Smith. 3**

A secondary course presenting the fundamental theorems of geometric optics and the theory of refraction, diffraction, interference and polarization of light. Physics 312 parallels this in the laboratory. Prerequisites: 211-212 and The Calculus. (Offered in 1960-61 and in alternate years.)

321-322. INTRODUCTION TO THEORETICAL PHYSICS Mr. Wheeler. 3

Introduction to the concepts of theoretical physics, statics and dynamics of systems of particles, motions of rigid body, harmonic motions, vibrating systems, and the generalized methods of Lagrange and Hamilton. The second semester deals with elasticity, hydrodynamics, elementary field concepts, and an introduction to relativity. The course is open to juniors and seniors who expect to major in Physics, Mathematics, Engineering, and Chemistry. Prerequisites: 211-212 and The Calculus, or consent of instructor.

333. KINETIC THEORY AND THERMODYNAMICS Mr. Smith. 3

Lecture course presenting selected topics of the kinetic theory of gases, the derivation of equations of state, and the laws of thermodynamics with implications and applications. Prerequisites: 211-212 and The Calculus. (Offered in 1961-62 and in alternate years.)

334. MODERN PHYSICS Mr. Smith. 3

This course introduces the conduction of electricity through gases, the elementary particles of physics, the structure of matter, radiation, radioactivity and nuclear physics. Prerequisites: 211-212 and The Calculus. (Offered in 1961-62 and in alternate years.)

344. THERMIONICS AND ITS APPLICATION Mr. Howe. 4

Laboratory and class work presenting fundamental ideas of thermionic emission and its application in vacuum tubes with their salient characteristics: electronic circuits in common practice in radio and telephone. Prerequisites: 211-212 and The Calculus, or consent of instructor.

361-362. DIRECTED STUDY IN PHYSICS Staff. 3**431-432. ELEMENTS OF ELECTRICAL ENGINEERING** Mr. Smith. 4

Lecture and laboratory course presenting the general theory of direct and alternating current circuits and machinery. Prerequisites: 211-212, and The Calculus.

461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

THE TEACHING OF SCIENCE (See Education 311.)

PSYCHOLOGY

Mr. Wolf, Mr. Havorka, Mr. Mountjoy, Mr. Honig, Mr. Seidel,
Mr. Slough, Mr. Tritt (part-time)
Chairman (1958-61), Mr. Wolf

MAJOR IN PSYCHOLOGY

A major in Psychology requires a minimum of 26 hours in Psychology including courses 111 (or 211), 112, 315, 341, 413, 414, and 441-442.

General Education 40a and 40b are strongly recommended.

A student contemplating graduate work in Psychology should obtain a reading knowledge of at least one foreign language, preferably French or German, and should also enroll in other courses in Mathematics, Biology, and Physics, as advised, to meet individual needs.

CONCENTRATION IN PERSONNEL ADMINISTRATION

This program is designed to provide an understanding of personnel policies and practices applicable in business and industry and in the field of education.

A major with this specialization is required to take a minimum of 24 semester hours in Psychology including courses 111 (or 211), 112, 226, 320, 341-342, and 417.

He is also required to take the following related courses: Economics 211-212, 317-318; Sociology 207, 415; and Government 211 or 212.

He should also register for as many as possible of the following related courses (a minimum number of nine semester-hours in this group is required); Economics 223-224, 316, 419, 442, 444; Government 231-232, 302; Mathematics 203; Speech 221; and Education or other related courses as advised.

Psychology 111 or 211 is prerequisite to all other credit courses in the department with the exception of 101.

101. PSYCHOLOGY OF EFFECTIVE STUDY

Mr. Smith. 1

Offered primarily for the student with demonstrated deficiencies but open to others on an elective basis. Includes such topics as time-scheduling, note-taking, reading speed, and reading comprehension. Meets three hours a week.

- 111, 112. INTRODUCTION TO PSYCHOLOGY Staff. 4
A survey of traditional topics in psychology, with emphasis on scientific methods and interpretation of data. (First semester: Three hours of lecture, two hours of laboratory; Second semester: Two hours of lecture, four hours of laboratory.)
211. GENERAL PSYCHOLOGY Staff. 3
Introduction to the general nature and principles of behavior. (Offered each semester.)
217. CHILD AND ADOLESCENT DEVELOPMENT Mr. Carter. 3
Psychological development especially during the school years. (Also listed as Education 217.) Offered each semester.
226. PSYCHOLOGY OF ADJUSTMENT Mr. Smith, Mr. Tritt. 3
Motivations of man with emphasis upon behaviors requisite for adequate living. (Offered each semester.)
- 315-316. EXPERIMENTAL PSYCHOLOGY Mr. Mountjoy. 3
Experimental approach to human behavior emphasizing experimental design and research.
320. PERSONNEL PSYCHOLOGY Miss Hartshorn. 3
A consideration of the psychological principles and procedures in effective personnel management, with special reference to business and industry.
338. SOCIAL PSYCHOLOGY Mr. Mountjoy. 3
Individual behavior as it is influenced by cultural forces.
339. PHYSIOLOGICAL PSYCHOLOGY Mr. Honig. 2
A study of the physiological mechanisms of behavior. Prerequisite: General Education 51-52 or consent of instructor.
- 341-342. PSYCHOLOGICAL TESTS AND MEASUREMENTS Mr. Hovorka, Mr. Slough. 3, 2
Theory of psychological measurements (first semester) and application of individual and group tests (second semester).
- 345-346. MINOR PROBLEMS Staff. 2 or 3
Independent work on selected topics under the guidance of staff members. Consent of instructor.
- 361-362. DIRECTED STUDY IN PSYCHOLOGY Staff. 3
411. ABNORMAL PSYCHOLOGY Mr. Wolf. 4
Psychopathology: Its development, course, and treatment with emphasis upon prevention and cure.

413. HISTORY OF PSYCHOLOGY Mr. Lichtenstein. 3
A review of the history of psychological thought and theory.
414. SYSTEMATIC PSYCHOLOGY Mr. Lichtenstein. 3
A study of the schools of psychological thought and theory.
417. INDUSTRIAL PSYCHOLOGY Mr. Seidel. 3
Psychological principles and methods as they contribute to the solution of industrial problems. Prerequisite: 341.
420. INTRODUCTION TO CLINICAL PSYCHOLOGY Mr. Tritt. 3
A survey designed to acquaint the student with the role and function of the clinical psychologist. Consent of instructor.
- 441-442. ADVANCED GENERAL PSYCHOLOGY Mr. Wolf. 2
Designed to integrate the student's knowledge of psychology.
- 445-446. MINOR PROBLEMS Staff. 2 or 3
Independent work on selected topics under the guidance of staff members. Consent of instructor.
- 461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

RELIGION

Mr. J. L. Martin, Mr. Lee O. Scott, Mr. Woodyard
Chairman (1960-63), Mr. Martin

MAJOR IN RELIGION

Among the 24 semester-hours of credit for a major in this department 211, 212, 213-214, 217, 301, and 303 are required. It is recommended that a student majoring in Religion take at least six hours of Philosophy.

A pre-theological student need not major in Religion but is advised to take 211, 212, 213-214, and 217 as a basis for graduate theological study. A student planning for a church vocation without graduate training (such as pastor's assistant, church secretary, or assistant in religious education) should begin planning course sequences with the chairman of the department by the beginning of the sophomore year.

118. THE LIFE AND TEACHINGS OF JESUS 3
A detailed study of Jesus' life and teachings, based on the Four Gospels. (Not offered in 1960-61.)

211. INTRODUCTION TO THE OLD TESTAMENT Mr. Scott. 3
Orientation to the study of the Bible: an introduction to the history, literature, and religion of the Old Testament.
212. INTRODUCTION TO THE NEW TESTAMENT Mr. Martin. 3
An introduction to the religion and literature of the New Testament; the rise of the Christian Church.
- 213-214. HISTORY OF CHRISTIAN THOUGHT Mr. Martin. 3
A survey of the development of Christianity from the apostolic church to the Protestant Reformation (first semester), to the present time (second semester). The rise of the principal theological ideas, the changing concept of the church, trends and movements within Christianity, and changing attitudes toward ethical problems, such as war, the state, the family, and property. (Offered in 1961-62 and in alternate years.)
217. THE FAITHS OF MANKIND Mr. Martin. 3
A study of the major living religions of the world, with special reference to Hinduism, Buddhism, and Islam.
218. CONTEMPORARY AMERICAN RELIGIOUS GROUPS Mr. Martin. 3
A survey of the development of religion in America; the rise of the major denominations and representative sects, with reference to their origin, organization, and faith and practice; a study of movements such as Fundamentalism, the Social Gospel, and the Ecumenical Movement.
301. CHRISTIAN ETHICS Mr. Scott. 3
A critical study of the fundamentals of Christian morality as represented in contemporary Christian authors. 213, 214 are recommended.
303. BASIC ISSUES IN RELIGION Mr. Scott. 3
A consideration of the basic beliefs of Christianity such as faith in God, the Person of Christ, participation in community, conception of man's nature and needs, and views about the good life. Special attention will be given to Christian beliefs with focus on the actual and possible religious life of modern man. 213-214 recommended.
311. WESTERN CHRISTIAN CLASSICS Mr. Martin. 3
A careful study of selected writings which have expressed classical forms of Western Christianity; or which have been important in the formation of Christian thought. Such works as Augustine's *Confessions*, Luther's *Lectures on Romans*, John Woolman's *Journals*, and Kierkegaard's *Fear and Trembling*, will be read. (Offered first semester 1960-61 and in alternate years.)

324. SEMINAR IN RELIGION AND PSYCHOLOGY

3

A study of the inter-relationships between contemporary Christian and psychological interpretations of the nature of man, the self, freedom and determinism, and human destiny; application of contemporary psychological insights to understanding of the religious life. Junior standing and consent of instructor. (Not offered in 1960-61.)

336. RELIGION AND CULTURE

Mr. Martin. 3

The relationship between historic religions and the cultures in which they come to expression. Attention is given to Christianity as compared with Hinduism and Buddhism; the relation of religion to language, the arts, and other aspects of culture. (Offered in second semester 1960-61 and in alternate years.)

361-362. DIRECTED STUDY IN RELIGION

3

PHILOSOPHY OF RELIGION

(See Philosophy 401 for description.)

461-462. INDIVIDUAL WORK FOR HONORS

3

SOCIOLOGY

Mr. Mitchell, Mr. Crist, Mr. Valdes, Mr. D. G. Dean,
Mrs. Watson (part-time)
Chairman (1959-62), Mr. Mitchell

MAJOR IN SOCIOLOGY

The major in Sociology is designed for a student who expects to pursue graduate study in Sociology leading to a teaching or research career, as preparation for those who anticipate entering social work and government service, and for those whose interest is primarily cultural.

A major in Sociology shall earn at least 24 semester-hours and preferably 30 semester-hours of credit in Sociology, including 207, 420, either 219 or 222, and at least 15 semester-hours of credit from the following related courses: Economics 312, 313, 317-318, 332, 413; Geography 226; Government 212, 213, 214, 302, 311, 312, 313, 346; History 221-222; Mathematics 121-122, 203, 211-212; Philosophy 303, 321, 326, 327; Physical Education 215; Psychology 211, 217, 226, 338, 411; and Religion 213-214, 217, 218, 301; Sociology 201, 314, 405; and French 101-102, German 101-102, Spanish 101-102.

Students contemplating graduate study must take 222 and should secure a reading knowledge of either French or German.

Departmental majors should take 207, Economics 211- 212, and Government 211 rather than General Education 71-72. It is recommended that Sociology 207 be taken in the sophomore year.

General Education 71-72 or Sociology 207 will serve as prerequisite for all Sociology courses except 201 elected by those not majoring in Sociology.

201. EDUCATION FOR MARRIAGE AND FAMILY LIFE Mr. Crist. 3

To acquaint the student with the findings of the biological psychological, and social sciences as they relate to marriage and family life. (Offered each semester.)

207. FOUNDATIONS OF SOCIAL LIFE Staff. 4

The study of man, of human social organization, culture, and language, emphasizing both primitive and later technology, behavior, institutions, and the dynamics of society.

208. HUMAN ECOLOGY Staff. 3

Population, distribution, composition, growth, and their bearing on current economic, political, and social problems.

211. CRIMINOLOGY Mr. Mitchell. 3

A study of the phenomenon of crime in American society as to amount, the varying rates in terms of area of residence, age, social class, and occupational group, and the causes and the treatment of criminal behavior.

219. METHODS IN SOCIAL RESEARCH Staff. 3

An elementary course for non-graduate school majors in the methods and interpretation of social research.

222. SOCIAL INVESTIGATION Staff. 3

Principal methods of social research are examined; planning and conducting of a research project and the use of current techniques of collecting, analyzing, interpreting, and reporting data. Prerequisite: Mathematics 203.

307. RURAL-URBAN REGIONS Mr. Dean. 4

Comparative and interrelated study of rural-urban life considering the physical, institutional, social, cultural, and economic factors of modern living.

308. SOCIAL WORK

Staff. 3

A survey course including an analysis of public administration and private agencies and a descriptive comparison of types of social work including both case and group work.

312. RACE PROBLEMS IN THE UNITED STATES

Mr. Mitchell. 4

Indians, Orientals, Negroes, and other minority groups in the United States.

313. THE FAMILY

Mr. Crist. 3

A study of the structure of the family as an institution and of its inter-relationships with other social institutions; changing economic and social functions of the family as seen in historical and cultural perspective. Prerequisite: 211 or consent of instructor.

314. FAMILY PROBLEMS

Mr. Crist. 3

Emphasis is on the social-psychological aspects of inter-personal relationships within the family. The content is case-history oriented. Prerequisite: 211 or consent of instructor.

315. COMMUNITY ORGANIZATION

Mr. Dean. 3

A study of natural and interest groupings within the community; analysis of community structure and the problems of community organization; the formation and analysis of programs for making effective community services and institutions.

317. THE SOCIOLOGY OF RELIGION

Staff. 2

A study of the institution of religion, particularly from the structural-functional approach. (Offered in 1961-62 and in alternate years.)

318. EDUCATIONAL SOCIOLOGY

Mr. Valdes. 2

Prerequisite: Sociology 207 or its equivalent or Education 217. (Also listed as Education 318.)

330. GENERAL ANTHROPOLOGY

Mr. Valdes. 3

A descriptive, comparative, and generalizing study of man and his culture.

340. COLLECTIVE BEHAVIOR

Mr. Dean. 3

The study of crowd and mass behavior, public opinion, the behavior of interest groups, social unrest and social movements involving an analysis of the nature and forms of group interaction leading to the creation of attitudes, beliefs, social controls. Prerequisite: Psychology 338 or consent of instructor.

361-362. DIRECTED STUDY IN SOCIOLOGY

Staff

Credit earned will be determined by departmental evaluation.

405. THE NURSERY SCHOOL

Mrs. Watson. 3

This course introduces the student interested in the young child to the principles and theories underlying education for the pre-school child and to techniques of observing young children and working with them as individuals and in groups. Two hours each week will be spent in the Granville Nursery School.

415. HUMAN RELATIONS IN INDUSTRY

Staff. 3

A study of the organization and characteristics of modern industrial societies, of the effects of technology on industrial environments, and of the behavior of formal and informal groups in industry. The methodology of social research for analyzing and resolving group tensions in industry.

416. SOCIOLOGICAL THEORIES

Mr. Voldes. 3

A survey of the more important literature of theoretical sociology, comparing the work of major systematic sociologists from Conte to the present. Open only to majors, or by consent of instructor.

420. SEMINAR

Mr. Mitchell. 3

Advanced study of special problems suggested by courses already taken. Open only to majors.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

THE TEACHING OF SOCIAL STUDIES (See Education 320.)

SPEECH

Mr. Crocker, Mr. Hall, Mr. Dresser
Chairman (1960-63), Mr. Crocker

MAJOR IN SPEECH

A student majoring in Speech shall elect a minimum of 24 hours in Speech including 225, 312, 331, and 309 or Education 339. Other courses will be suggested to conform to the needs of the individual student.

113-114. ORAL READING

Mr. Crocker. 3

Not open to students who have received credit in Theatre Arts 113 or 114.

211-212. PUBLIC SPEAKING

Mr. Crocker. 3

218. SPEECH COMPOSITION

Mr. Crocker. 3

Analysis of masterpieces of public speaking of ancient and modern times. Masterpieces of the platform, radio, and television will be studied. Lectures, discussions, papers.

219. INTERCOLLEGIATE DEBATING

Mr. Hall. 2

The questions to be used in the intercollegiate debates will be studied and members of the men's and women's teams will be chosen from this class. Freshmen are organized into a separate class meeting one hour a week. A total of six hours in debating may be counted toward graduation.

220. DISCUSSION AND DEBATE

Mr. Crocker. 3

How to lead and take part in group discussions. Parliamentary law, conferences, discussion, argumentation.

221. BUSINESS AND PROFESSIONAL SPEAKING

Mr. Crocker. 3

Advanced public speaking. Prepared speeches appropriate to business and professional life. Consent of instructor.

225. INTRODUCTION TO RADIO

Mr. Hall. 3

The history of radio development; a study of the structure of broadcasting; comparative study of broadcasting practices in other countries; the objectives of radio as a social force and cultural influence; a study of program types; and the analysis of existing programs aimed toward the development of acceptable standards for radio. Prerequisite: General Education 10s or equivalent.

226. RADIO WORKSHOP

Mr. Hall. 3

Comprehensive lecture-laboratory course covering the basic techniques of radio acting, writing, announcing, and directing. Prerequisite: 225 and consent of instructor.

227. RADIO PRODUCTION PROCEDURES

Mr. Hall. 3

Lecture-laboratory course in the production of complex program types; study of production problems, techniques, and procedure. Actual production from initiation to airing. Prerequisite: 226 and consent of instructor.

228. TELEVISION WORKSHOP

Mr. Hall. 3

Classroom work with mock-up television equipment. Production of scenes incorporating production problems, direction, camera operation, plotting of scenes, etc.

229. CONTEMPORARY RADIO

Mr. Hall. 2

During spring vacation a trip to the four major radio networks in New York will be made to observe station operation, studio arrangements, the production of various types of programs from re-

hearsal through performance, and the production of television programs. Study of network operational policies and procedure precede the trip; a written report of the trip is required. Estimated cost of trip, exclusive of tuition, \$75 to \$100. Consent of instructor.

309. SEMINAR IN SPEECH Mr. Crocker. 2
Readings and reports in the six areas of speech.

312. RHETORICAL THEORY Mr. Crocker. 2
Historical and critical survey of the principal theories of speech composition and delivery from Aristotle to the present time, with special emphasis on the classical period.

330. VOICE AND DICTION Mr. Hall. 3

331. INTRODUCTION TO SPEECH CORRECTION Mr. Hall. 3
The relation of speech to mental hygiene; an introduction to phonetics and to the study of speech disorders; types, characteristics, diagnosis, and theories of treatment. Prerequisites: 12 hours of Speech and/or Theatre Arts. (Offered in 1961-62 and in alternate years.)

- 361-362. DIRECTED STUDY IN SPEECH OR RADIO Staff. 3

- 461-462. INDIVIDUAL WORK FOR HONORS Staff. 3

THE TEACHING OF SPEECH (See Education 339.)

THEATRE ARTS

Mr. Wright, Mr. Brasmer, Mr. R. G. Smith
Chairman (1958-61), Mr. Brasmer

MAJOR IN THEATRE ARTS

A student majoring in Theatre Arts shall elect 28 to 32 semester-hours. Among the courses should be 111-112 (or General Education 33), 215-216, 217, 218, 301 or 302, 323, 324, 326, and 415-416 with additional hours in other courses representing acting, technical or theory, and criticism. Recommended courses in allied fields are English 321-322, 329, and 330, and such other courses as the department feels the student may need.

The candidate for the Bachelor of Fine Arts degree in Theatre Arts will, in four years, choose a minimum of 32 hours from the reg-

ular Theatre courses. An additional 12-18 hours in Theatre will be arranged with each individual student in accordance with his particular needs or talents.

In the freshman year the Bachelor of Fine Arts candidate should carry General Education 11-12, 18, 21-22, the second year of the foreign language carried in high school or French 111-112. Theatre courses should be Theatre Arts 111-112, 113, and either 114 or 227.

111-112. INTRODUCTION TO THE THEATRE

Staff. 2

Beginning course designed for the student with some experience or interest in dramatics. Theory and practice in various phases of theatre production and criticism. Open to freshmen; upperclassmen by consent. May be substituted for General Education 33. Both semesters required.

113. DRAMATIC INTERPRETATION

Mr. Wright. 3

(Students majoring in Theatre Arts may substitute this course for General Education 10t.) Intensive work on individual voice and diction problems and the dramatic interpretation of the intellectual and emotional content of the best literature in essays, narratives (stories and dialects), dramas, and poetry. *Not open to students who have had Speech 113 or 114.*

114. ADVANCED DRAMATIC INTERPRETATION

Mr. Wright. 3

An elective to follow Theatre Arts 113 or General Education 10t. This course places emphasis on developing an individual platform personality and the building of a repertoire. *Not open for credit to students who have received credit in Speech 114.*

215-216. FUNDAMENTALS OF PLAY PRODUCTION

Mr. Wright. 2

Play selection, analysis, acting, make-up, direction, organization of personnel and management. Designed for non-majors with theatre interest and for certification to teach. Non-majors must carry 217 to receive credit. Prerequisite: 111-112 or General Education 33.

217, 218. INTRODUCTION TO TECHNICAL PROBLEMS

Mr. Smith. 2

Basic course in physical theatre orientation, stage machinery and techniques, nomenclature, construction and painting of scenery, lighting and backstage organization. May be carried independently but 217 must be taken to receive credit in 215-216.

224. STAGE LIGHTING

Mr. Smith. 2

Theory and practice of basic electricity and the proper use of lights in present day theatre with special emphasis toward the lighting of a production with limited equipment.

- 225. CONTEMPORARY THEATRE** Mr. Wright. 2
Attendance at outstanding productions in New York during spring vacation, preceded by study of contemporary theatre and followed by a written report of the productions seen. Estimated cost of trip, exclusive of tuition, \$125. Consent of instructor.
- 227-228. ACTING FOR BEGINNERS** Mr. Brasmer. 2
First semester—Pantomime and stage movement.
Second semester—Character analysis and creation; emotional interpretation and projection.
- 229-230. ADVANCED ACTING** Mr. Brasmer. 2
Work in styles of acting. Consent of instructor.
- 235. CHILDREN'S THEATRE** 2-3
Specialized work in preparation and presentation of a play for children by adults. Consent of instructor. (Not offered in 1960-61.)
- 301. SCENE DESIGN** Mr. Smith. 2-3
Advanced work in the theory and practice of scene design, construction, and painting. Students will have responsibility in backstage work on University and Experimental productions. Prerequisite: 217 or 224.
- 302. THEATRE PLANNING AND ARCHITECTURE** Mr. Smith. 2-3
Surveying the development of the physical forms of the theatre with emphasis on contemporary professional, college, high school, and civic theatre building. Also the planning and designing of new theatres.
- 323. THEATRE HISTORY** Mr. Brasmer. 3
Survey of World Theatre from the Greeks to the present, exclusive of America. Emphasizes influences—cultural, social, and political—as well as personalities, methods of production, and development of drama.
- 324. AMERICAN THEATRE AND FILM HISTORY** Mr. Brasmer. 3
History of the American Theatre and the history and birth of the American Film in the light of their aesthetic dynamics and interrelationships. (Not offered in 1960-61.)
- 326. THEORY OF THE THEATRE** Mr. Wright. 3
The analysis and comparison of dramatic theories from Aristotle to the present with emphasis on present trends of stage and motion pictures. Prerequisite: 12 hours of Theatre Arts. (Not offered in 1961-62.)

361-362. DIRECTED STUDY IN THEATRE ARTS

Staff. 3

401. MAJOR TECHNICAL PROBLEMS

Staff. 2-4

Open to students with special talent in lighting, direction, costuming, acting, playwriting, dramatic interpretation or such projects as may be necessary to complete a well-rounded background in their major field. May be taken as credit through participation in Denison Summer Theatre. Consent of instructor.

415-416. PLAY DIRECTION

Mr. Brasmer. 3

Theory and practical work in direction. Each student is responsible for selection, casting, rehearsing, and production of one-acts or longer plays presented in the Experimental Theatre. Prerequisite: 15 hours of Theatre Arts and consent of instructor.

461-462. INDIVIDUAL WORK FOR HONORS

Staff. 3

CONSERVATORY OF MUSIC

FACULTY

DALE K. MOORE, Mus. B., Mus. M.

Director of the Conservatory
Assistant Professor of Music

CHORAL ORGANIZATIONS

Graduate of University of Kansas, 1954; post-graduate work at Mozarteum, Salsburg, Austria, on United States Fulbright grant, 1954-55; graduate study, University of Kansas, 1955-56. Concerts and opera in Austria and Germany. Student of Joseph Wilkins, Reinhold Schmidt, Beulah Chiapusso, Fritz Tutenberg, Ernst Reichert, Bernhard Paumgartner. Member of faculty, University of Kansas, summer sessions, 1951-53; instructor in music and director of men's glee club, The College of Wooster, 1956-57.

KARL H. ESCHMAN, Ph.B., A.M., F.A.G.O., Mus.D.

Jessie King Wiltsee Professor of Music

MUSIC THEORY

Graduate of Denison University in piano and organ; graduate student, Harvard University 1911-12, under Walter R. Spalding and Edward Burlingame Hill; 1912-13, under Hugo Kaun and Victor Heinze, Berlin; under Erwin Stein, Egon Wellesz and others, University of Vienna, 1929-30; under Walter Piston, Harvard University, 1942; member of the faculty, Ohio State University and Northwestern University summer sessions, 1926-29 and 1935-54; Visiting professor of theory, School of Music, University of Michigan, Summer session, 1955. Fellow of American Guild of Organists. Awarded honorary Doctor of Music degree by Denison in 1956.

BRAYTON STARK, Mus.B., A.B., A.M., F.A.G.O.

University Organist
Associate Professor of Music

ORGAN AND THEORY

Graduate of Guilmant Organ School; post-graduate work at Eastman School of Music; theory with T. Tertius Noble and organ with Joseph Bonnet, organist of Cathedral of St. Eustache, Paris;

director of music at Christ Church, Corning, N. Y.; Fellow of American Guild of Organists. Graduate of Denison in music and in liberal arts; A.M., Harvard University.

ROBERT MILLER, Mus. B., Mus. M., Licence de Concert from
Paris, France

Associate Professor of Music

PIANO

Graduate of Northwestern University, 1948; post-graduate work and degree at Northwestern University, 1949, and Conservatoire Americain at Fontainebleau, France, summer 1949. United States Fulbright Grant 1950-51, Ecole Normale de Musique de Paris (first prize of the school); United States Fulbright Prize Award 1951-52, Conservatoire National de Musique de Paris. Student of Louis Crowder, Robert Casadesus, Alfred Cortot, Yves Nat, and Aldo Ciccolini. Member of the faculty of Northwestern University, summer session 1950.

HERMAN LARSON, A.B.

Assistant Professor of Music

VOICE

Graduate of Augustana College, Sioux Falls, S.D., 1938; graduate student, American Conservatory of Music, Chicago, 1933-37, voice with Theodore Harrison and theory with Leo Sowerby and Jeanne Boyd; instructor, Valparaiso University, Valparaiso, Ind., 1935-36, and Joliet Conservatory of Music, Joliet, Ill., 1936-37; associate professor, University of Oklahoma, 1937-44.

GEORGE R. HUNTER, B.F.A. in Mus. Ed., B.F.A., M.F.A.

Assistant Professor of Music and Music Education

BRASS, WOODWINDS, AND BAND

Two music degrees, one with a trumpet major, and a graduate degree at Carnegie Institute of Technology. Director of music, Etna High School in Pennsylvania; assistant professor of music and director of band and glee club, Waynesburg College in Pennsylvania.

FRANK J. BELLINO, B.F.A., Mus. M.

Assistant Professor of Music

STRINGED INSTRUMENTS

Graduate of Ohio University, 1949; graduate study in music literature, Eastman School of Music, 1951, and post-graduate work in viola and violin; studied on scholarships at Colorado College, summers of 1948-52; Berkshire Music Center (Tanglewood), summer of 1947. Fulbright Research Scholar, Conservatory of Santa Cecilia, Rome, Italy, 1956-57. Studied viola and violin with Francis Tursi, Eastman School of Music; Ferenc Molnar, solo violist with San Francisco Symphony Orchestra; studied with Paul Hindemith, Roy Harris, Willi Apel, Nicholas Stonimsky, Robert Shaw, and Irvine McHose. Played with Rochester (N.Y.) Philharmonic Orchestra, 1949-52; Houston (Texas) Symphony, 1953-54; Minneapolis Symphony Orchestra, 1954-58; and Chicago's Grant Park Symphony Orchestra, summers, 1956-58.

JAMES YORK, Mus. B., Mus. M.

Instructor in Music

PIANO

Graduate of University of Kansas, 1954; graduate degree from University of New Mexico, 1958; studied piano with Ann Saint John, Donald Swarthout, Paul Snyder, George Robert, and Eunice Norton; teaching assistant in piano, University of New Mexico, 1957-58.

LYLE WOLFROM, Mus. B., Mus. M.

Instructor in Music (part-time)

VIOLONCELLO

Graduate of University of Kansas; graduate degree, Indiana University; 'cellist with Kansas City Philharmonic Orchestra; principal 'cellist with Seventh Army Symphony, 1954-55; 'cellist with Columbus (Ohio) Symphony Orchestra and instructor in 'cello at Capital University since 1958.



MUSIC CURRICULUM

THEORETICAL STUDIES

Courses in the theory and history of music will be found listed in detail under the Department of Music in the regular list of college courses in the catalog. (See Department of Music.)

SEMINAR IN MUSIC

Every student working toward any degree in music is required to complete eight semesters of satisfactory attendance at a Seminar in Music held once each week throughout the semester. (No more than one unexcused absence constitutes satisfactory attendance.) This seminar deals with problems of general musical interest which cannot be covered in course work or private lessons. No academic credit is given.

APPLIED STUDIES

Proficiency in one department of Applied Music is a requirement for graduation. To obtain the *Conservatory Diploma* the student must appear in a public recital near the end of his senior year. If he chooses to substitute normal study for the recital and shows evidence of ability to teach his major subject, he will receive a *Conservatory Teacher's Certificate*.

A student who selects violin, voice, violoncello, or other field, as his major must take piano as a minor subject until he is able to play piano music of the third grade of difficulty.

The number of years required to complete the work in any applied study depends entirely upon the student's ability and previous training. Examinations at intervals, beginning at the end of the freshman year, will be given to the student to ascertain his standing. In general, these examinations consist of technical demonstrations, the performance of prepared compositions from memory, and the playing of one selection prepared without the aid of the teacher.

PIANO

It is the aim of the Department of Music to study and to meet the individual needs of each student. In accordance with this policy, the department accepts a student for *private lessons only*.

Especial attention is paid to the laying of careful foundations in technical work. Modern principles of relaxation and of good tone pro-

duction are emphasized. Facility and velocity are sought, but artistic interpretation is even more desirable. This is, of course, impossible of attainment without an adequate technique.

The student's attention is called to the problems underlying program-making, and his knowledge of piano literature is supplemented by theoretical work.

For junior standing in this department, a student must play all major and minor scales in three speeds; scales of thirds, fourths, and octaves, and arpeggios of all triads, diminished and dominant sevenths; Bach's three-part inventions, a Haydn sonata, compositions by Schubert, Brahms, and others.

For senior standing, a student must achieve greater speed and facility in all technical work. Other requirements are scales in double sixths, fugues from the *Well-Tempered Clavier*, a Beethoven sonata, and compositions by Schumann, Chopin, impressionist and contemporary composers.

VOICE

The general aim of all vocal training is to try to coordinate breath pressure, phonation, and resonance in such a manner that each pupil can develop his or her voice to its utmost capacity in terms of quality, range, volume, and flexibility. The vocal student is required to study a modern foreign language in order to cultivate vocal diction in more than one idiom. He is also required to study the piano and is advised to begin this study early in his course.

Vocal instruction will be directed toward the problems peculiar to the voice, and to song interpretation, to rhythm, and to phrasing. The song literature of all schools, lieder, arias, ballads, and art songs are used.

The student in voice is urged to participate in the University chorus, and to study solfeggio and elementary theory.

For junior standing in this department, a student must be able to sing effectively songs of moderate difficulty in English and in one other language.

For senior standing, a student must show proficiency in advanced vocalization and in arias from opera and in oratorio in other languages.

For those who wish an introduction to singing, class lessons may be arranged (Voice Class, one hour credit). A student is accepted for private lessons at any stage of advancement.

ORGAN

Study of the piano is a prerequisite for the study of the organ. Whether or not the student has fulfilled this requirement is determined by the instructor. The department reserves the right to require more piano study.

Because the acquisition of a smooth legato style at the organ is the objective, the music for advanced study is selected from those composers who are especially idiomatic—Bach, Mendelssohn, Rheinberger, Guilmant, and others. Both concert and church music are studied.

For junior standing in this department, the student must pass examinations which will require him to play a composition previously studied; to play a selection prepared without the aid of the teacher; to play at sight a simple trio for two manuals and pedal; to play pedal scales (major or minor) of two notes at 120 mm.; to transpose at sight a passage in four-part harmony into keys not more than one tone higher or lower, and to play simple modulations.

For senior standing, the student must play a composition previously studied and a selection prepared without a teacher's help. In addition, he must play at sight a more difficult trio, must play pedal scales (major and minor) of four notes at 84 mm., and also arpeggios. He must also transpose at sight a passage in four-part harmony into keys not more than a major third higher or lower and must play modulations into remote keys.

VIOLIN AND VIOLONCELLO

Those entering violin and violoncello playing for the first time will find especial attention paid to matters of position, bowing, and fingering. From the start, production of good tone with clear intonation is emphasized.

More advanced pupils are introduced to a wide range of literature. Ensemble playing is encouraged. Any student sufficiently advanced has the opportunity of playing in the University orchestra which combines with the Licking County Symphony Orchestra in a series of concerts and also accompanies the two major choral performances given each season.

The aim is for a broad musicianship and a high plane of artistic conception and interpretation.

For junior standing, the student must pass examination in violin based upon technical studies by Mazas (*Opus 36*), Kreutzer, or Fiorillo and sonatas by pre-classic Italian composers and Handel, and also shorter contemporary compositions.

For senior standing, he may expect to be examined on the *Twenty-four Caprices* of Rode and concertos by Spohr, Mozart, and Nardini, together with sonatas by Mozart and Beethoven.

WIND INSTRUMENTS

Those playing wind instruments for the first time will be taught to build a good embouchure and helped to acquire a good tone, good articulation, and the control necessary for good phrasing. More advanced pupils will be introduced to a wide range of literature for their particular instrument, and for junior and senior standing will be examined on material comparable in difficulty to that required by other departments.

MUSICAL ORGANIZATIONS

CONCERT CHOIR of 80 mixed voices, formerly A Cappella Choir, sings at several student chapels, Handel's *Messiah*, the Spring Festival, and on various other programs, including a home concert each year. In recent years Palestrina's *Stabat Mater*, Randall Thompson's *The Peaceable Kingdom*, Bach's *Magnificat*, and Mendelssohn's *Elijah* have been performed.

ENSEMBLE work in string, wind, and piano classes is offered for students sufficiently advanced.

THE BAND is organized as the Stadium Band during the football season, appearing at home games and making several trips to out-of-town games. During the winter and spring the Concert Band rehearses and appears in one or more concerts.

THE DENISON STRING ORCHESTRA affords students the opportunity of playing in concerts and in both music festivals. Members are also invited to play in the Licking County Symphony Orchestra.

THE MEN'S GLEE CLUB with 80 years of tradition behind it is in frequent demand for various short programs. The club appears on radio programs, and gives several home concerts each year.

THE WOMEN'S GLEE CLUB presents an annual concert, sings for Chapel on occasion, and travels from time to time. It also joins the Men's Glee Club in a concert for the Spring Festival.

THE CHAPEL CHOIR of 36 voices from the Concert Choir sings at student chapels, appears at a home concert, and in other programs.

SUMMARY OF STUDENT ENROLLMENT

First Semester, 1959-60

	Men	Women	Total
Seniors	166	137	303
Juniors	153	120	273
Sophomores	197	200	397
Freshmen	239	217	456
Non-degree Special	0	1	1
Total	755	675	1,430
Special (college rank)	9	19	28
Special (non-college)	1	0	1
	765	694	1,459
Conservatory of Music (Applied Music Students)			
College rank	19	53	72
Non-college	3	5	8
Music Total	22	58	80

Second Semester, 1959-60

	Men	Women	Total
Seniors	161	135	296
Juniors	148	117	265
Sophomores	178	190	368
Freshmen	223	217	440
Non-degree Special	0	0	0
Total	710	659	1,369
Special (college rank)	5	17	22
Special (non-college)	1	0	1
	716	676	1,392
Conservatory of Music (Applied Music Students)			
College rank	19	43	62
Non-college	3	8	11
Music Total	22	51	73

SUMMARY OF ENROLLMENT BY STATES AND FOREIGN COUNTRIES

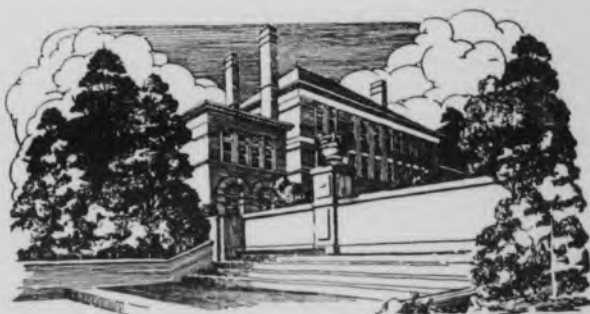
First Semester, 1959-60

States	Men	Women	Total
Alabama	0	1	1
California	7	5	12
Colorado	1	0	1
Connecticut	23	18	41
Delaware	1	2	3
District of Columbia	1	7	8
Florida	4	5	9
Georgia	1	3	4
Hawaii	2	0	2
Illinois	71	101	172
Indiana	14	17	31
Iowa	2	2	4
Kentucky	8	8	16
Maine	1	1	2
Maryland	9	13	22
Massachusetts	22	15	37
Michigan	43	37	80
Minnesota	0	2	2
Missouri	6	10	16
Montana	0	1	1
New Hampshire	1	2	3
New Jersey	24	25	49
New York	81	67	148
North Carolina	2	0	2
Ohio	333	232	565
Oklahoma	2	2	4
Pennsylvania	63	63	126
Rhode Island	1	1	2
South Carolina	1	0	1
Texas	3	1	4
Vermont	0	1	1

SUMMARY OF ENROLLMENT

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Virginia -----	2	3	5
Washington -----	2	1	3
West Virginia -----	5	10	15
Wisconsin -----	10	14	24
<hr/>			
Total United States -----	746	670	1,416
British Crown Colony (Hong Kong) -----	1	0	1
Burma -----	1	0	1
Canada (Americans) -----	2	0	2
Canal Zone (American) -----	0	1	1
Hungary -----	0	2	2
India -----	1	0	1
Republic of Korea -----	1	0	1
Saudi Arabia (Americans) -----	2	0	2
Southern Rhodesia (American) -----	1	0	1
Sweden (American) -----	0	1	1
Venezuela (American) -----	0	1	1
<hr/>			
Grand Total -----	755	675	1,430
Total States Represented -----			35
Total Foreign Countries Represented -----			11



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*Alumnus of Denison University

- *GEORGE D. CURTIN, B.S., M.F.— *President, Pardee and Curtin Lumber Company*
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- *CHARLES W. DEEDS, B.S., M.B.A.— *Industrialist*
750 Main Street, Hartford, Conn.
- CYRUS S. EATON, A.B., M.A., C.D.L., LL.D.— *Chairman, Board of Directors, Chesapeake and Ohio R.R. Company*
2000 Terminal Tower, Cleveland 13, Ohio
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49 East 33rd Street, New York 16, N.Y.
- *WILLIAM P. HUFFMAN, B.S.— *President, Buckeye Iron and Brass Works*
2750 Ridgeway Road, Dayton 9, Ohio
- FRANKLIN G. SMITH, LL.D.— *Chairman, Board of Directors The Osborn Manufacturing Company*
Apt. 410, 13700 Shaker Blvd., Cleveland 20, Ohio
- NORMAN F. SMITH, B.S.— *President, The Osborn Manufacturing Company*
5401 Hamilton Avenue, Cleveland 14, Ohio
- *FORD R. WEBER, B.S.— *Foster Bros., Weber and Company*
241 Superior Street, Toledo 4, Ohio

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P.O. Box 88, Pittsburgh 30, Pa.
- FREDERICK C. CRAWFORD, A.B., M.C.E., D.Eng., LL.D.— *Chairman, The Executive Committee of Thompson Ramo Wooldridge, Inc.*
23555 Euclid Avenue, Cleveland 17, Ohio
- *ALBERT W. DAVISON, B.S., M.A., Ph.D., D.Sc.— *Research Consultant, Owens-Corning Fiberglas Research Center, Granville, Ohio*
1199 Moundview Avenue, Newark, Ohio
- *EDWARD A. DEEDS, B.S., D.Eng.— *Retired*
20 Exchange Place, New York 5, N.Y.

*Alumnus of Denison University

RANDOLPH EIDE, A.B., LL.D., Com. D. *Retired President, Ohio Bell Telephone Company*

3232 Rumson Road, Cleveland Heights 18, Ohio

*GEORGE M. ROUDEBUSH, Ph.B., LL.B.— *Attorney-at-Law*
Roudebush, Adrion, Sanborn, Brown, and Corlett
 915 Williamson Building, Cleveland 14, Ohio

*G. HERBERT SHORNEY, B.S.— *Secretary, Hope Publishing Company*
 5707 West Lake Street, Chicago 44, Ill.

GAMES SLAYTER, B.S., D.Eng.— *Vice President and Director of*
Research, Pioneering Laboratory, Owen-Corning Fiberglas Corp.
 P.O. Box 415, Granville, Ohio

*PERCY L. WILTSEE, A.B.— *Retired*
 3547 Raymar Drive, Cincinnati 8, Ohio

*JOHN E. F. WOOD, M.A., LL.B.— *Attorney-at-Law,*
Dewey, Ballantine, Bushby, Palmer, and Wood
 Room 2900, 40 Wall Street, New York 5, N.Y.

CLASS III—TERM EXPIRES JUNE, 1963

*CHARLES G. ASHBROOK, Ph.B.— *President, North American*
Life Insurance Company
 36 South State Street, Room 1600, Chicago 3, Ill.

*ROBERT W. ENGLEHART, Ph.B., LL.B.— *President, Parker*
Rust Proof Corporation
 2177 East Milwaukee Avenue, Detroit 11, Mich.

WILLIAM F. HUFSTADER, L.H.D.— *Vice President, General*
Motors Corporation
 14-132 General Motors Building, Detroit, Mich.

*ALICE MCCANN JAMES (Mrs. Harold A.), A.B.—
 4922 Courville Road, Toledo 13, Ohio

*GEORGE C. MCCONNAUGHEY, Ph.B., LL.B., LL.D.—*Attorney-at-Law*
McConnaughey, McConnaughey, and Stradley
 50 West Broad Street, Columbus 15, Ohio

EVERETT D. REESE, B.S.—
Chairman, Board of Directors, City National Bank
and Trust Company
 20 East Broad Street, Columbus 15, Ohio

*Alumnus of Denison University

CHARLES LYON SEASHOLES, A.B., B.D., D.D., L.H.D.—*Minister, First Baptist Church*

111 West Monument Avenue, Dayton 2, Ohio

*THOMAS R. SHEPARD, A.B.— *The Shepard Insurance Agency*
924 Union Trust Building, Cincinnati, Ohio

*HENRY S. STOUT, B.S.— *Consultant, John Hancock Life Insurance Company*
Room 709, Gas and Electric Building, Dayton 2, Ohio

*DEXTER J. TIGHT, B.S.— *Retired*
170 Wildwood Way, Woodside, Calif.

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Attorney-at-Law, Arter, Hadden, Wykoff and Van Duzer
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914 West Village Drive, Newark, Ohio
(Term expires in 1961)

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Superintendent, Evanston Township High School
1600 Dodge Avenue, Evanston, Ill.
(Term expires in 1962)

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24680 Mound Road, Warren, Mich.
601 North Glengary Road, Birmingham, Mich.
(Term expires in 1962)

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1834 Eye Street, N.W., Washington 6, D.C.
(Term expires in 1963)

*MARY ESTEY NASH (MRS. ARTHUR L.) B.A.—
Realtor, Westchester County, New York
7 Sheridan Road, Seven Bridges, Chappaqua, N.Y.
(Term expires in 1963)

*Alumnus of Denison University

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2027 Beach Drive, S.E., St. Petersburg, Florida
- EDMUND G. BURKE, 1942-1959 *Realtor*
Room 601, 188 Montague Street, Brooklyn 1, N. Y.
- *LORENA WOODROW BURKE (*Mrs. Charles F.*), Ph.B., 1937-1959
375 Riverside Drive, New York 25, N. Y.
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P.O. Box 56, Granville, Ohio

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ROBERT M. WALKER, B.A., B.D.	<i>Executive Secretary, Denison Christian Association</i>

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CHARLES K. HENDERSON, B.A., M.S.	<i>Assistant Director</i>
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WILLIAM O. BRASMER, JR., B.S., M.A.	<i>Director of Theatre</i>
RIX N. YARD, B.S., M.S., Ed.D.	<i>Director of Athletics</i>
BEATRICE P. STEPHENS, A.B.	<i>Executive Secretary, Denison Society of the Alumni</i>

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EURIE M. LOUGHRIDGE, Ph.B.	<i>Assistant to the Controller</i>
HELEN MAE GRIFFITH	<i>Assistant to the Controller</i>

FACULTY

- A. BLAIR KNAPP, 1951- *President*
 A.B., Syracuse; M.A., Syracuse; LL.D., Syracuse; L.H.D.,
 Temple and Trinity; HH.D., Bowling Green State; L.H.D.
 Redlands.
- PARKER E. LICHTENSTEIN, 1949- *Dean of the College
and Professor of Psychology*
 B.S., Massachusetts; M.S., Massachusetts; Ph.D., Indiana.
- * * *
- COL. ROBERT H. ALLYN, USAF, 1958- *Professor of Air Science*
 B.A., Upper Iowa.
- ROBERT W. ALRUTZ, 1952- *Assistant Professor of Biological Sciences*
 B.S., Pittsburgh; M.S., Illinois; Ph.D., Illinois.
- K. DALE ARCHIBALD, 1948- *Professor and Chairman, Biological
Sciences*
 B.A., Denison; M.A., Ohio State; B.D., Colgate-Rochester; Ph.D.,
 Ohio State.
- ***ROBERT L. BANCROFT, 1954- *Associate Professor of Modern
Languages*
 A.B., Univ. of Washington; A.M., Univ. of Washington; Ph.D.,
 Columbia.
- FRANCIS C. BAYLEY, 1946- *Professor of Logic*
 A.B., Dickinson; B.D., Drew; Ph.D., Columbia.
- FRANK J. BELLINO, 1958- *Assistant Professor of Music*
 B.F.A., Ohio Univ.; Mus. M., Eastman.
- *PAUL L. BENNETT, 1947- *Professor of English*
 B.A., Ohio Univ.; M.A., Harvard.
- DONALD J. BETTINGER, 1958- *Assistant Professor of Chemistry*
 B.S., Miami; M.S., Cincinnati; Ph.D., North Carolina.
- JOHN L. BJELKE, 1925-1951 *Secretary-Emeritus, Denison Society
of the Alumni*
 Ph.B., Denison; M.A., Columbia.
- WILLIAM O. BRASMER, JR., 1948- *Professor and Chairman,
Department of Theatre Arts*
 B.S., Northwestern; M.A., Northwestern.

*** On leave both semesters 1960-61.

* On sabbatical leave first semester 1960-61.

- JANET H. BROWN, 1959- *Instructor in English*
(part-time)
B.A., Carleton; M.A., Smith.
- JOHN B. BROWN, 1952- *Associate Professor of Chemistry*
B.S., Kentucky; Ph.D., Northwestern.
- **MERLE E. BROWN, 1954- *Associate Professor of English*
A.B., Michigan; A.M., Michigan; Ph.D., Michigan.
- MARY K. CAMPBELL, 1956- *Instructor in Art*
- ROBERT S. CARTER, 1949- *Professor of Psychology in*
the Department of Education
B.S., Bucknell; M.S., Bucknell; Ph.D., New York Univ.
- WILLIS A. CHAMBERLIN, 1891-1937 *Professor-Emeritus of Modern*
Languages
A.B., Denison; A.B., Harvard; A.M., Denison; Ph.D., Chicago;
Litt.D., Denison.
- G. WALLACE CHESSMAN, 1950-51; 1953- *Associate Professor of*
History
A.B., Harvard; M.A., Harvard; Ph.D., Harvard.
- ***ALPHA C. CHIANG, 1954- *Associate Professor of Economics*
B.A., St. John's (China); M.A., Colorado; Ph.D., Columbia.
- EDWARD M. COLLINS, 1948- *Associate Professor of Chemistry*
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- DOMINICK P. CONSOLO, 1958- *Assistant Professor of English*
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